Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 9, 1984

State of Utah
Natural Resources and Energy
Division of Water Rights
74 West Main
Price, Utah 84501

Attention: Mark Page

RE: TXP - Iron Springs #1-3
San Juan County, Utah

Gentlemen:

This will confirm your telephone conversation of November 9, 1984, with Cammye Singletary of this office. Transco desires to use the water source on Mr. Lou Calvert's land. This source has previously been assigned Permit Number 09121 by your office, and the Application to Appropriate Water is approved for "water for drilling purposes".

Transco proposes to drill the above referenced well at the following location:

1714' FEL and 271' FSL of Section 3 (SW¼ SE¼)
T33S, R25E, San Juan County, Utah

We plan to spud this well on or about December 1, 1984. We anticipate this project being complete by March 1, 1985. Additionally, we feel that 7 acre/ft. will be a reasonable quantity of water used for the drilling and completion of this well.

If you require additional information, please contact me at (713) 439-3502 or Cammye Singletary at (713) 439-3503.

Sincerely,

TXP OPERATING COMPANY
By Transco Exploration Company
its Managing General Partner

John Rosata - Acting Supervisor
Regulatory and Environmental Affairs

cc: Department of Natural Resources
Division of Oil, Gas, and Mining

TRANSCO EXPLORATION COMPANY

TXP IRON SPRINGS 1-3
DRILLING PROGNOSIS

1. Surface Formation:

Cretaceous Mancos

2. Formation Tops:

Ground Elevation: 6769' approximately

A.	Dakota	56'
B.	Morrison	267'
C.	Entrada	1071'
D.	Navajo	1264'
E.	Kayenta	1607'
F.	Wingate	1801'
G.	Chinle	2047'
H.	Shinarump	2580'
I.	Moenkopi	2665'
J.	Cutler	2687'
K.	Honaker Trail	4463'
L.	Paradox	5038'
M.	Upper Ismay	5797'
N.	Hovenweep Shale	5903'
O.	Lower Ismay	5966'
P.	Upper Desert Creek	6087'
Q.	Upper Desert Creek Salt	6113'
R.	Lower Desert Creek Salt	6155'
S.	Lower Desert Creek Pay	6203'
T.	Akah Salt	6271'
U.	Total Depth	6300'

3. If any water zones are encountered, they will be adequately protected and reported; none anticipated. The 2100' of surface casing will protect any near surface fresh water zones.

4. Casing and Cementing Program (All New Casing):

Hole Size	Interval	Size	Weight/Grade	Cement Type
20"	0-150'	13-3/8"	Culvert	Halliburton Light
12-1/4"	0-2100'	9-5/8"	36#, K-55	and "B"
8-1/2"	0-6300'	5-1/2"	17#, N-80	Same

5. Minimum Pressure Control Equipment (Schematic Attached)

Type:	10" - 900 Series (Double gate hydraulic w/manual and remote controls)
Pressure Rating:	3000 psi
Testing Procedure:	Equipment will be pressure tested to 70% interval yield strength surface casing and operational checks will be made daily and recorded on tour sheets.

6. Mud Program: (Visual Monitering)

Interval	Mud Type	Mud Weight	Viscosity	W.L.
0-2100'	Water	8.4-8.6	25-35	N/C
2100-5600'	Water, Gel	8.5-9.0	30-45	N/C
5600-6300'	Gel	8.5-10.5	30-45	8-10 cc

Sufficient mud inventory will be maintained on location during drilling to handle any adverse conditions that may arise. Mud inventory to be stock piled on location.

7. Auxiliary Equipment:

A. A lower kelly cock will be kept in the string at all times.
B. Periodic checks will be made each tour of the mud system.
C. A stabbing valve will be kept on the derrick floor to be stabbed into the drill pipe whenever the kelly is not in the string.
D. No bit float will be used.
E. Monitoring of the mud system will be visual and flow sensor device.

8. Evaluation Program:

Logs: DLL, GR, MSFL, FDC-CNL, MEL, BHC, from 6300' to 2100'
Dipmeter from 6300' to 5700'

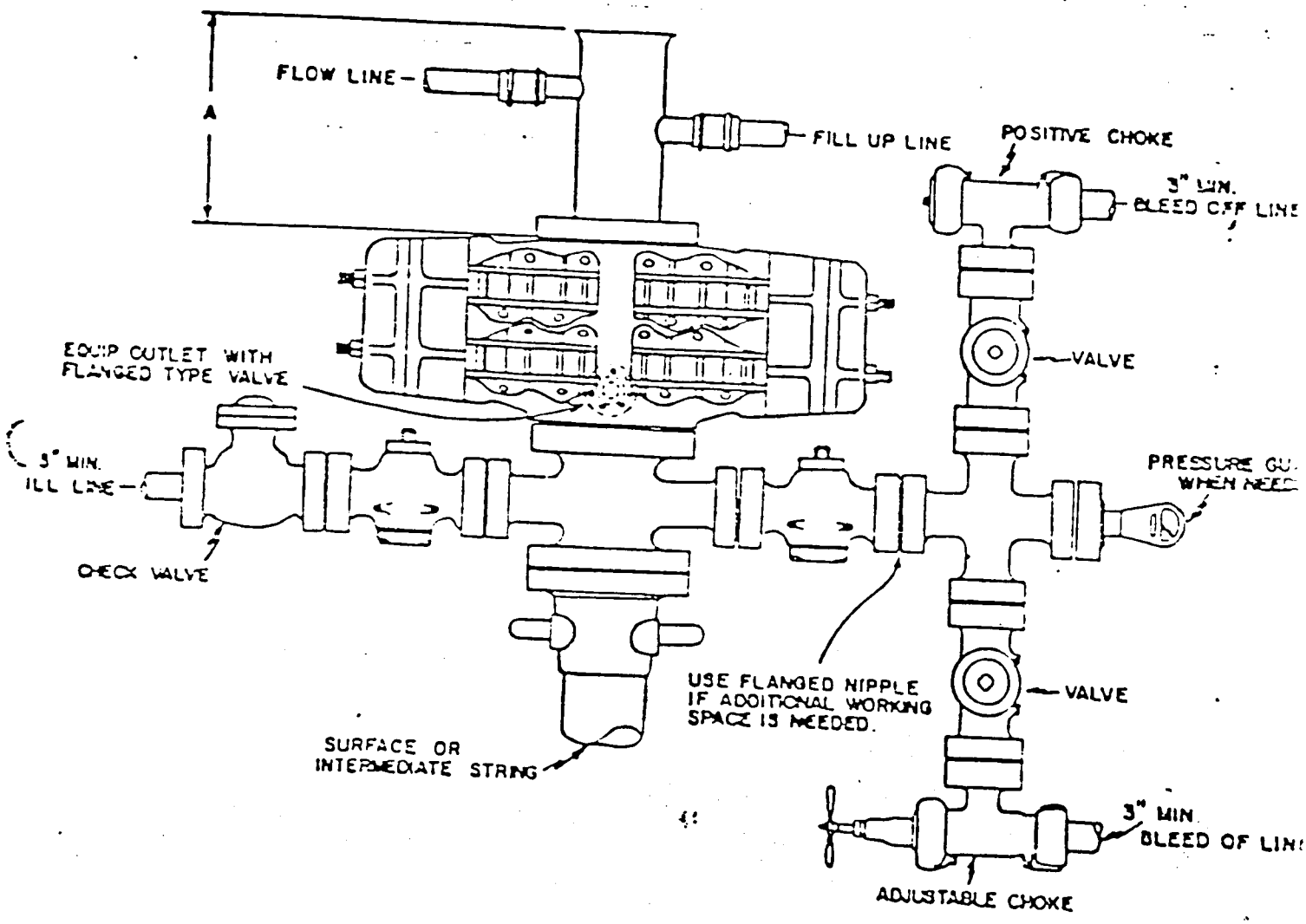
Cores: One definite in Upper Ismay
One possible in Lower Ismay
One possible in Lower Desert Creek
DST: One definite in Upper Ismay
Three more possible as indicated by shows or logs.
Stimulation: No stimulation has been formulated for this test at this time. If production casing is run, the potential producing interval will be perforated with jets. The state will be notified by "Sundry Notice" of a complete stimulation program. The drillsite, as approved, will be of sufficient size to accomodate all completion activities.

9. Abnormal Conditions:

It is not anticipated that abnormal temperatures, pressures, or toxic gases will be encountered. Although no H_2S has been reported from immediate offset wells, we will use H_2S detection equipment from the Honaker Trail (4463') to TD as a precaution.

10. Drilling Activity

Anticipated Commencement Date: December 1 , 1984
Required Drilling Days: Approximately 35
Required Completion Days: Approximately 40



BLOWOUT PREVENTER

9-10 inch 3000 psi

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 8, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
4241 State Office Building
Salt Lake City, Utah 84114

Attention: Arlene Sollis

RE: Application for Permit to Drill
TXP - Iron Springs #1-3
San Juan County, Utah

Dear Ms. Sollis:

Attached in triplicate is Transco's application for permission to drill the above referenced well. Survey plats and a ten point plan are included as as part of this Application for Permit to Drill. A copy of the Utah Division of Water Rights approval will be submitted to your office as soon as it is received.

We thank you in advance for your consideration and attention to this matter. Should you have any questions concerning this application or require additional information, please contact me at (713) 439-3502 or Cammye Singletary at (713) 439-3503.

Sincerely,

TXP OPERATING COMPANY
By Transco Exploration Company
its Managing General Partner

John Rosata - Acting Supervisor
Regulatory & Environmental Affairs

Form OGC-1a

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work: DRILL [X] DEEPEN [ ] PLUG BACK [ ]

b. Type of Well: Oil Well [X] Gas Well [X] Other — Single Zone [ ] Multiple Zone [ ]

2. Name of Operator
TXP OPERATING COMPANY
By: TRANSCO EXPLORATION CO. ATTN: JOHN ROSATA (713) 439-3502

3. Address of Operator
P. O. Box 1396, Houston, Texas 77251

4. Location of Well (Report location clearly and in accordance with any State requirements.*)
At surface: 1714' FEL & 271' FSL of Section 3 ($SW\frac{1}{4}$ $SE\frac{1}{4}$)
At proposed prod. zone: Vertical Well - Same as above

5. Lease Designation and Serial No.: Fee
6. If Indian, Allottee or Tribe Name: -
7. Unit Agreement Name: -
8. Farm or Lease Name: TXP - Iron Springs
9. Well No.: 1-3
10. Field and Pool, or Wildcat: Wildcat
11. Sec., T., R., M., or Blk. and Survey or Area: Section 3, T33S, R25E

14. Distance in miles and direction from nearest town or post office*
13 miles southwest to Monticello, Utah

12. County or Parrish: San Juan County, 13. State: Utah

15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drlg. line, if any): 271' FSL
16. No. of acres in lease: 1926.28
17. No. of acres assigned to this well: 40
18. Distance from proposed location* to nearest well, drilling, completed, or applied for, on this lease, ft.: N/A
19. Proposed depth: 6300'
20. Rotary or cable tools: Rotary
21. Elevations (Show whether DF, RT, GR, etc.): 6778.2
22. Approx. date work will start*: December 1, 1984

23. PROPOSED CASING AND CEMENTING PROGRAM

Size of Hole	Size of Casing	Weight per Foot	Setting Depth	Quantity of Cement
-	13-5/8"	Culvert Pipe	0 - 150'	N/A
12-1/4"	9-5/8"	36#/ft.	0 - 2100'	800 sacks
8-1/2"	5-1/2"	17#/ft.	0 - 6300'	*500 sacks

* Amount to be determined after logging

Transco proposes to drill this well to 6300' TD to theAkah Salt Formation. The primary objective is the Upper Ismay Formation. If productive, we will run casing to TD and complete. If dry, we will plug and abandon in accordance with Utah State regulations.

RECEIVED
NOV 13 1984
DIVISION OF OIL GAS & MINING

APPROVED BY THE STATE OF UTAH DIVISION OF OIL, GAS, AND MINING
DATE: 11/23/84
BY: John R. Baza

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
Signed: [signature] Title: Drilling Superintendent Date: 11-08-84

(This space for Federal or State office use)

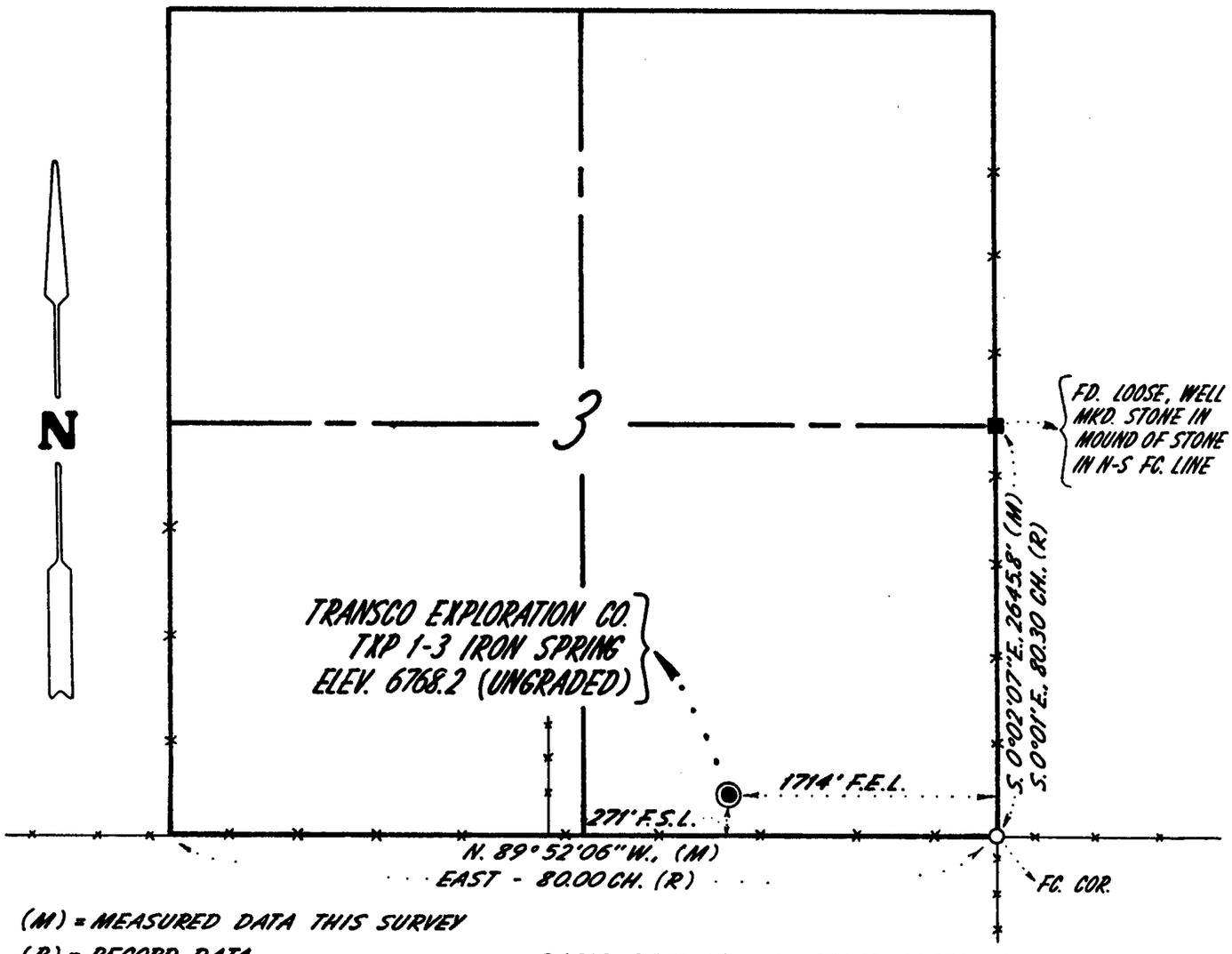
Permit No. ..... Approval Date .....

Approved by ..... Title ..... Date .....
Conditions of approval, if any:

*See Instructions On Reverse Side

PATHFINDER
300 Country Club Road
Suite 305
Casper, Wyoming 82609
(307) 266-3809

T. 33N., R. 25E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH
SECTION 3



(M) = MEASURED DATA THIS SURVEY
(R) = RECORD DATA

BASIS OF BEARINGS - SOLAR OBSERVATION

SCALE: 1" = 1000'

◉ = SURVEYED WELL LOCATION

PLATTED FIELD NOTES OF A SURVEY MARKING WELL LOCATION TRANSCO EXPLORATION CO. TXP 1-3 IRON SPRING, SW¼ SE¼ SEC. 3, T. 33N., R. 25E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH

SURVEYORS CERTIFICATE

STATE OF WYOMING)
COUNTY OF NATRONA) S.S.

I, PAUL A. REID, HEREBY STATE THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH UNDER PROVISIONS OF UTAH LAW. I FURTHER STATE THAT THIS PLAT REPRESENTS A SURVEY MADE UNDER MY DIRECT SUPERVISION AND RESPONSIBILITY BY STEVEN J. MALEY ON NOV. 1, 1984 FOR THE PURPOSE OF AN APPLICATION FOR PERMIT TO DRILL. ANY OTHER USE OF THIS PLAT WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR IS PROHIBITED.

PAUL A. REID) UTAH REG. L.S. 5669

JOB NO: 109-10/84

DATE: 11-5-84

NOTES: BOOK NO. W.L. 11
PGS. 33-40

REGISTERED PROFESSIONAL SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

UNGRADED ELEVATION OF TXP 1-3 IRON SPRING 6768.2

UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 12" × ⅜" SPIKES.

NORTH. . . .	.200.0	FEET. . . .	6768.5
SOUTH. . . .	"	"	6768.7
EAST	"	"	6767.7
WEST. . . .	"	"	6771.4

BASIS OF ELEVATIONS: U.S.G.S. 15' QUAD. "EASTLAND", ROAD INT. ON NORTH LINE OF SEC. 3, PRINTED ELEV. 6775

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 16, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84114

Attention: Arlene Sollis

RE: Request for Exception to Rule C-3(b)
TXP - Iron Springs #1-3
San Juan County, Utah

Dear Ms. Sollis:

An Application for Permit to Drill the above referenced well was submitted to you dated November 8, 1984. It has been brought to my attention that a Rule C-3(b) Exception is needed for this location, in view of the fact that this well is to be drilled 271' from the south lease line, instead of the 500' minimum requirement.

Transco Exploration Company hereby requests an exception to Rule C-3(b) based on topographical conditions. Additionally, please be advised that Transco is the leaseholder of 640 acres immediately to the south of this proposed well location, in Section 10, T33S, R25E, in San Juan County, Utah.

Please accept our apology for not having included this exception request as a part of our Application for Permit to Drill this well. If you require additionaly information, please contact me or Cammye Singletary at (713) 439-3502 or (713) 439-3503, respectively.

Sincerely,

TXP OPERATING COMPANY
By Transco Exploration Company
its Managing General Partner

John Rosata Jr

John Rosata - Acting Supervisor
Regulatory & Environmental Affairs

/cs

(TXP Operating Co.)

OPERATOR Transco Exploration Co. DATE 11-21-84

WELL NAME TXP - Iron Springs #1-3

SEC SW SE 3 T 33S R 25E COUNTY San Juan

43-037 - 31106	Fee
API NUMBER	TYPE OF LEASE

CHECK OFF:

✓	PLAT – says T33N (typo.)	✓	BOND	✓	NEAREST WELL
✓	LEASE	✓	FIELD	✓	POTASH OR OIL SHALE

PROCESSING COMMENTS:

No other wells within 1000' or 4960'

Water or - #09-121

Exception location requested

APPROVAL LETTER:

SPACING: ☐ A-3 _____ UNIT ☐ C-3-a _____ CAUSE NO. & DATE

☐ C-3-b ✓ C-3-c

STIPULATIONS:

#3

11/2/84
25020

STATE OF UTAH
NATURAL RESOURCES
Oil, Gas & Mining

Scott M. Matheson, Governor
Temple A. Reynolds, Executive Director
Dianne R. Nielson, Ph.D., Division Director

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

November 23, 1984

Transco Exploration Company
P. O. Box 1396
Houston, Texas 77251

Attention: John Rosata

Gentlemen:

Re: Well No. TXP-Iron Springs #1-3 - SW SE Sec. 3, T. 33S, R. 25E
271' FSL, 1714' FEL - San Juan County, Utah

Approval to drill the above referenced oil/gas well is hereby granted in accordance with Rule C-3(c), General Rules and Regulations and Rules of Practice and Procedure.

In addition, the following actions are necessary to fully comply with this approval:

1. Spudding notification to the Division within 24 hours after drilling operations commence.

2. Submittal to the Division of completed Form OGC-8-X, Report of Water Encountered During Drilling.

3. Prompt notification to the Division should you detetermine that its necessary to plug and abandon this well. Notify John R. Baza, Petroleum Engineer, (Office) (801) 538-5340, (Home) 298-7695 or R. J. Firth, Associate Director, (Home) 571-6068.

4. Compliance with the requirements and regulations of Rule C-27, Associated Gas Flaring, General Rules and Regulations, Oil and Gas Conservation.

5. This approval shall expire one (1) year after date of issuance unless substantial and continuous operation is underway or an application for an extension is made prior to the approval expiration date.

The API number assigned to this well is 43-037-31106.

Sincerely,

R. J. Firth
Associate Director, Oil & Gas

as
Enclosures
cc: Branch of Fluid Minerals

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 20, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas, and Mining
3 Triad Center, Suite 350
Salt Lake City, Utah 84114

Attention: Arlene Sollis

RE: TXP - Iron Springs #1-3
San Juan County, Utah

Dear Ms. Sollis:

This is to advise you that Cammye Singletary spoke with Mark Page of Natural Resources and Energy, Division of Water Rights, regarding the water source on Mr. Lou Calvert's land to be used in the drilling of the above referenced well. He advised that this source is approved for "water for drilling purposes" and has previously been assigned Permit Number 09121.

Hopefully, this will expedite the approval of our Application for Permit to Drill this well with your office. If you require any additional information, please contact me at (713) 439-3502 or Ms. Singletary at (713) 439-3503.

Sincerely,

TXP OPERATING COMPANY
By Transco Exploration Company
its Managing General Partner

John Rosata - Supervisor
Regulatory and Environmental Affairs

/cs

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 27, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas & Mining
355 West North Temple
3 Triad Center, Suite 350
Salt Lake City, Utah 84114

ATTN: Mr. Ron Firth

RE: Request for Confidential Status
TXP - Iron Springs #1-3
San Juan County, Utah

Gentlemen:

TXP OPERATING COMPANY hereby requests that all reports filed with the State of Utah be held "Confidential" for a period of six (6) months on the above referenced well.

If additional information is required please contact me at (713) 439-3502 or Cammye Singletary at (713) 439-3503.

Sincerely,

TXP OPERATING COMPANY
By: Transco Exploration Company
Its Managing General Partner

John Rosata Jr.

John Rosata - Supervisor
Regulatory & Environmental Affairs

CS/dsf

w/ok

CONFIDENTIAL

DIVISION OF OIL, GAS AND MINING

SPUDDING INFORMATION API #43-037-31106

NAME OF COMPANY: TRANSCO

WELL NAME: TXO-Iron Springs 1-3

SECTION SW SE 3 TOWNSHIP 33S RANGE 25E COUNTY San Juan

DRILLING CONTRACTOR Coleman

RIG # 3

SPUDDED: DATE 12-1-84

TIME 7:30 AM

HOW Rotary

DRILLING WILL COMMENCE _____

REPORTED BY Mike Patrick

TELEPHONE # 801-259-2025 (Rig)

DATE 12-1-84 SIGNED AS

To John D.

Date 12/17/84 Time 12:40

WHILE YOU WERE OUT

M Al Low

of Transco

Phone 259-2025 (big pk.)

Area Code Number Extension

TELEPHONED	✓	PLEASE CALL	✓
CALLED TO SEE YOU		WILL CALL AGAIN	
WANTS TO SEE YOU		URGENT	
RETURNED YOUR CALL			

Message Concerning some plugging questions !!

Operator

ORAL APPROVAL TO PLUG AND ABANDON WELL

Operator Transco Representative Al Long / Lee Amoroso

Well No. Iron Springs 1-3 Location ¼ ¼ Section 3 Township 33S Range 25E

County San Juan Field _____ State _____

Unit Name and Required Depth _____ Base of fresh water sands _____

T.D. ~~6030~~ 6339 Size hole and Fill per sack ____" ____' Mud Weight and Top _____#/gal. _____'

Casing Size	Set At	Top of Cement	To Be Pulled
9⅝	2090	surf.	
14	100		

Formation	Top	Base	Shows
Moenkopi	2596		
Cutler	2631		
Hoover Tr.	4471		
U. Ismay	5761		
L. Ismay	5961		
Desert Cr.	6093		

Plugging Requirements

From	To	Sacks Cement
① 5700	6100	
② 2040	2140	
③ Surf plug		

* They will inject approx 150-200 bbl of drilling fluid between 1st x second plug.

REMARKS

DST's, lost circulation zones, water zones, etc., _____

Approved by JRB Date 12/20/84 Time 1030 hrs a.m. p.m.

Transco
Exploration Company
A Subsidiary of Transco Energy Company

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

November 29, 1984

State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
355 West North Temple
3 Triad Center Suite 350
Salt Lake City, Utah 84114

ATTN: Arlene Sollis

RE: TXP - Iron Springs #1-3
San Juan County, Utah

Dear Ms. Sollis:

This will confirm our telephone conversation of November 27, 1984, in which you advised that the plats for the above referenced well are incorrect. You stated that the township shown by Pathfinder is T33N, when, in fact, it should be T33S. Attached are three copies of the corrected plat from Pathfinders with the township shown as T33S.

If you require additional information or assistance please contact me at (713) 439-3503.

Sincerely,

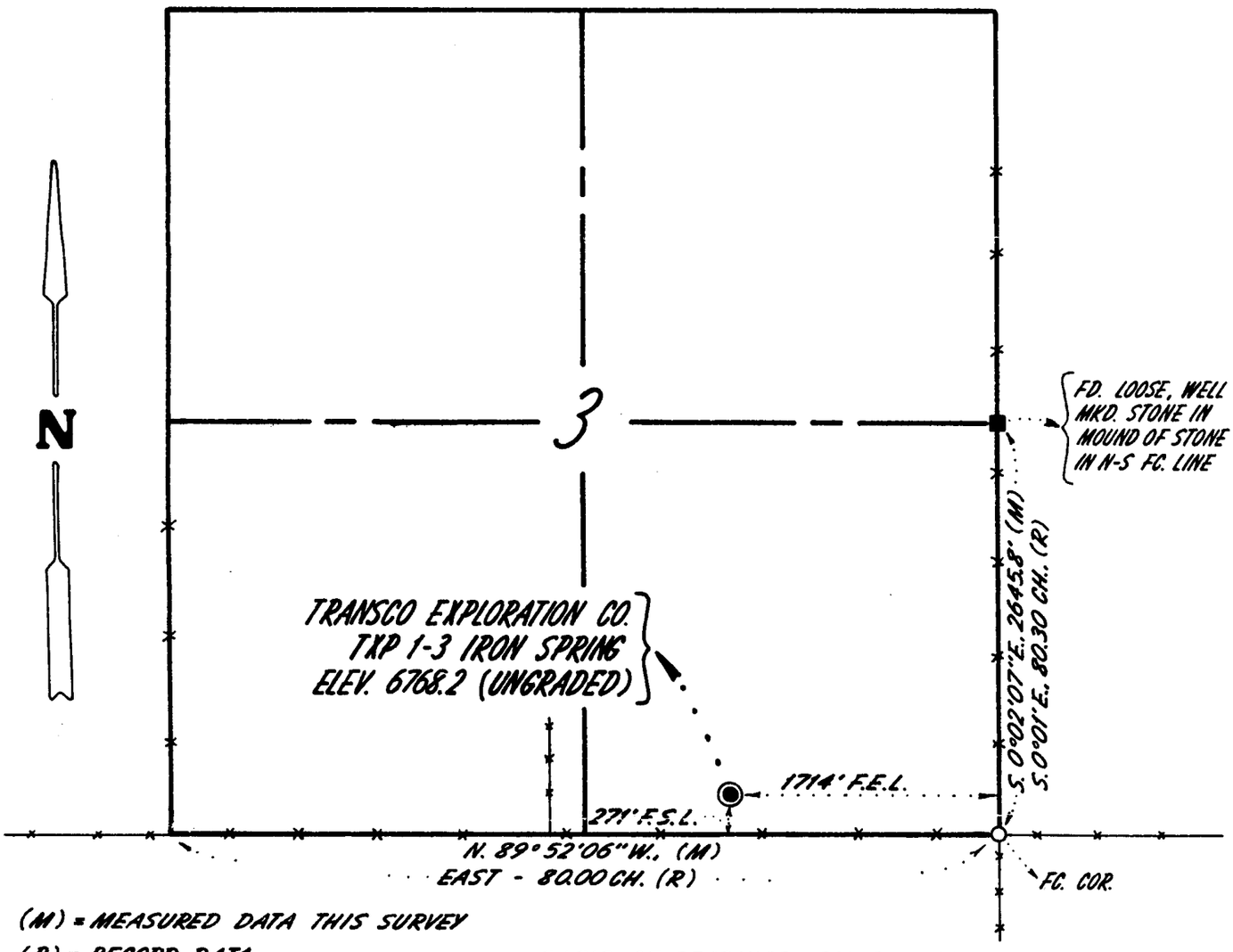
TXP OPERATING COMPANY
By: Transco Exploration Company
its Managing General Partner

Cammye Singletary
Regulatory Affairs Drilling Technician

CS/df

PATHFINDER
300 Country Club Road
Suite 305
Casper, Wyoming 82609
(307) 266-3809

T. 33 S., R. 25 E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH
SECTION 3



(M) = MEASURED DATA THIS SURVEY
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BASIS OF BEARINGS - SOLAR OBSERVATION

SCALE: 1" = 1000'

◉ = SURVEYED WELL LOCATION

PLATTED FIELD NOTES OF A SURVEY MARKING WELL LOCATION TRANSCO EXPLORATION CO. TXP 1-3 IRON SPRING, SW¼ SE¼ SEC. 3, T. 33 S., R. 25 E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH

SURVEYORS CERTIFICATE

STATE OF WYOMING)
COUNTY OF NATRONA) S.S.

I, PAUL A. REID, HEREBY STATE THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH UNDER PROVISIONS OF UTAH LAW. I FURTHER STATE THAT THIS PLAT REPRESENTS A SURVEY MADE UNDER MY DIRECT SUPERVISION AND RESPONSIBILITY BY STEVEN J. MALEY ON NOV. 1, 1984 FOR THE PURPOSE OF AN APPLICATION FOR PERMIT TO DRILL. ANY OTHER USE OF THIS PLAT WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR IS PROHIBITED.

PAUL A. REID UTAH REG. L.S. 5669

REGISTERED PROFESSIONAL LAND SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

JOB NO: 109-10/84

DATE: 11-5-84

NOTES: BOOK NO. W.L. 11
PGS. 33-40

REVISED COPY 11-27-84
TOWNSHIP DESIGNATION

UNGRADED ELEVATION OF TXP 1-3 IRON SPRING 6768.2

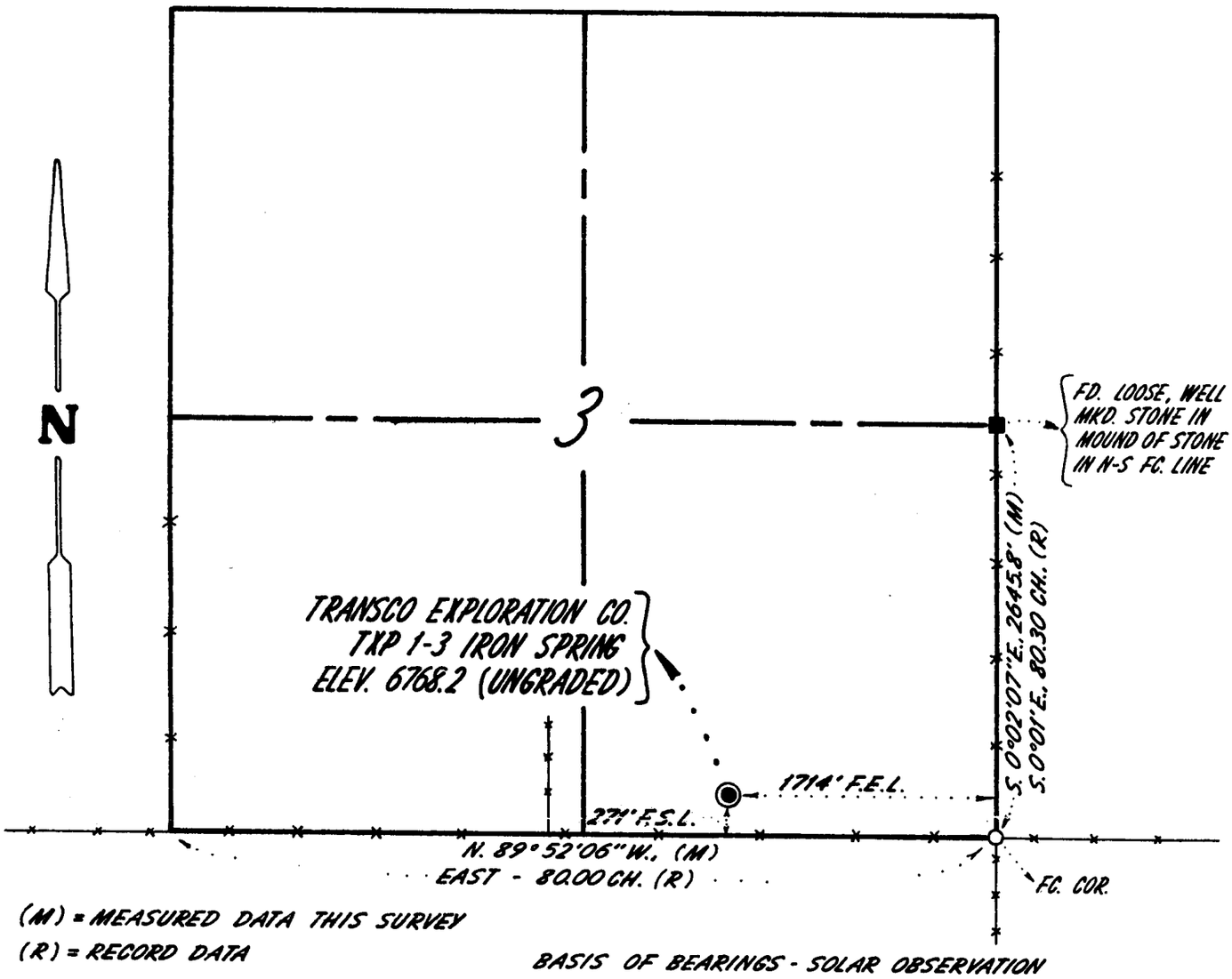
UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 12" × ⅜" SPIKES.

NORTH. . . .	2000	FEET.	6768.5
SOUTH. . . .	"	"	6768.7
EAST	"	"	6767.7
WEST. . . .	"	"	6771.4

BASIS OF ELEVATIONS: U.S.G.S. 15' QUAD. "EASTLAND", ROAD INT. ON NORTH LINE OF SEC. 3, PRINTED ELEV. 6775

PATHFINDER
300 Country Club Road
Suite 305
Casper, Wyoming 82609
(307) 266-3609

T. 33 S., R. 25 E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH
SECTION 3



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PAUL A. REID UTAH REG. L.S. 5669

JOB NO.: 109-10/84

DATE: 11-5-84

NOTES: BOOK NO. W.L. 11
PGS. 33-40

REVISED COPY 11-27-84 - TOWNSHIP DESIGNATION

REGISTERED PROFESSIONAL SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

UNGRADED ELEVATION OF TXP 1-3 IRON SPRING 6768.2

UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 12" × ⅜" SPIKES.

NORTH	200.0	FEET	6768.5
SOUTH	"	"	6768.7
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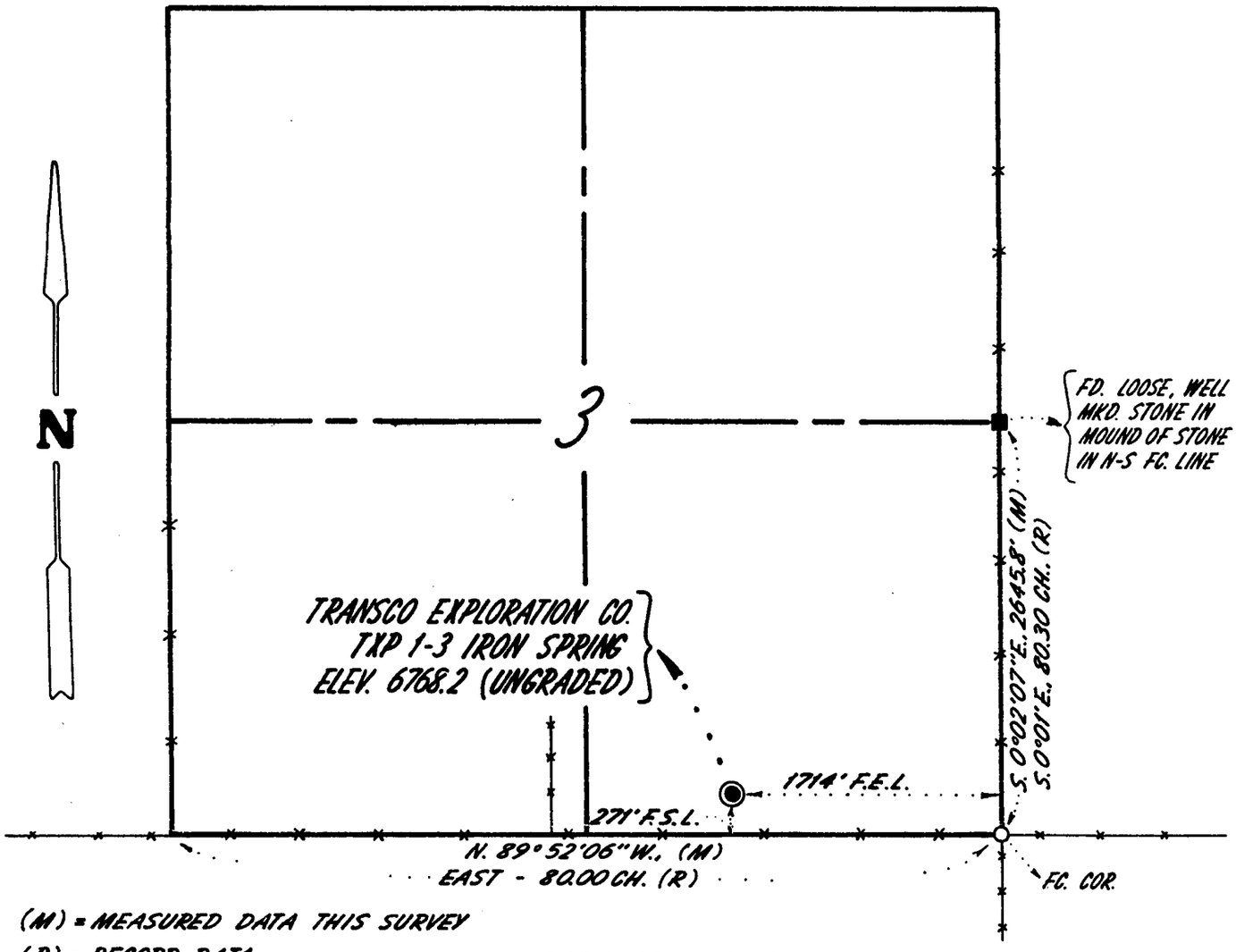
WEST	"	"	6771.4

BASIS OF ELEVATIONS: U.S.G.S. 15' QUAD. "EASTLAND", ROAD INT. ON NORTH LINE OF SEC. 3, PRINTED ELEV. 6775

PATHFINDER
300 Country Club Road
Suite 305
Casper, Wyoming 82609
(307) 266-3809

T. 33 S., R. 25 E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH
SECTION 3



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STATE OF WYOMING)
COUNTY OF NATRONA) S.S.

PLATTED FIELD NOTES OF A SURVEY MARKING WELL LOCATION TRANSCO EXPLORATION CO. TXP 1-3 IRON SPRING, SW¼ SE¼ SEC. 3, T. 33 S., R. 25 E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH

I, PAUL A. REID, HEREBY STATE THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH UNDER PROVISIONS OF UTAH LAW. I FURTHER STATE THAT THIS PLAT REPRESENTS A SURVEY MADE UNDER MY DIRECT SUPERVISION AND RESPONSIBILITY BY STEVEN J. MALEY ON NOV. 1, 1984 FOR THE PURPOSE OF AN APPLICATION FOR PERMIT TO DRILL. ANY OTHER USE OF THIS PLAT WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR IS PROHIBITED.

PAUL A. REID UTAH REG. L.S. 5669

REGISTERED PROFESSIONAL LAND SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

JOB NO.: 109-10/84
DATE: 11-5-84
NOTES: BOOK NO. W.L. 11
PGS. 33-40

REVISED COPY 11-28-84
TOWNSHIP DESIGNATION

UNGRADED ELEVATION OF TXP 1-3 IRON SPRING 6768.2

UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 12" × ⅜" SPIKES.

NORTH. . . .	200.0	FEET. . . .	6768.5
SOUTH. . . .	"	"	6768.7
EAST	"	"	6767.7
WEST. . . .	"	"	6771.4

BASIS OF ELEVATIONS: U.S.G.S. 15' QUAD. "EASTLAND", ROAD INT. ON NORTH LINE OF SEC. 3, PRINTED ELEV. 6775

Form DOGC-4

STATE OF UTAH

DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL & GAS CONSERVATION
4241 STATE OFFICE BUILDING
SALT LAKE CITY, UTAH 84114
533-5771

State Lease No. .....
Federal Lease No. .....
Indian Lease No. .....
Fee & Pat. .....

REPORT OF OPERATIONS AND WELL STATUS REPORT

STATE Utah COUNTY San Juan FIELD/LEASE Iron Springs 1-3

The following is a correct report of operations and production (including drilling and producing wells) for the month of: December, 19 84.

Agent's Address P.O. Box 1396
Houston, Texas 77251

Phone No. .....

Company TXP Operating Company
Signed John Rosata, Jr.
Title Supervisor - Regulatory and Environmental Affairs

Sec. and ¼ of ¼	Twp.	Range	Well No.	Days Produced	Barrels of Oil	Gravity	Cu. Ft. of Gas (In thousands)	Gallons of Gasoline Recovered	Barrels of Water (if none, so state)	API NUMBER/REMARKS (If drilling, depth; if shut down, cause; date and result of test for gasoline content of gas)
Section 3 SW 1/4 SE 1/4	33S	25E	1-3	0	0	0	0	0	0	Spudded: 12-01-84 TD: 6330 Drove 13-3/8" casing to 100 & cemented. Drilled to 2095' & ran 9-5/8" 36#, K-55 LTC casing to 2090'. Cemented same w/800 sacks of cement. Drilled to 5790'. Ran DST #1. Let packer at 5680'. Flowed at 4.5 hours. Cored well. Drilled to 5966'. Ran DST #2 & #3. Let packer at 5840'. Tested. Drilled to 6330 w/9.2 ppg mud. Logged well. Ran DIL, Sonic, CNL/CBL, DLL/GR & dipmeter. Ran DST #4. Let packer at 6204'. Approval from John Baza to P & A on 12-20-84. 100' cement plug, from 6140' - 6040'; 100' cement plug from 5810' 5710'; 100' cement plug from 2140'-2040'. N/D BOP's. Cut off wellhead. Let cement plug @85' w/25 sacks Class B in 9-5/8" casing. Rig released at 0900 hours on 12-21-84.

GAS: (MCF)
Sold .....
Flared/Vented .....
Used On/Off Lease .....

OIL or CONDENSATE: (To be reported in Barrels)
On hand at beginning of month .....
Produced during month .....
Sold during month .....
Unavoidably lost .....
Reason: .....
On hand at end of month .....

DRILLING/PRODUCING WELLS: This report must be filed on or before the sixteenth day of the succeeding month following production for each well. Where a well is temporarily shut-in, a negative report must be filed. *THIS REPORT MUST BE FILED IN DUPLICATE.*

Note: The API number must be listed on each well.

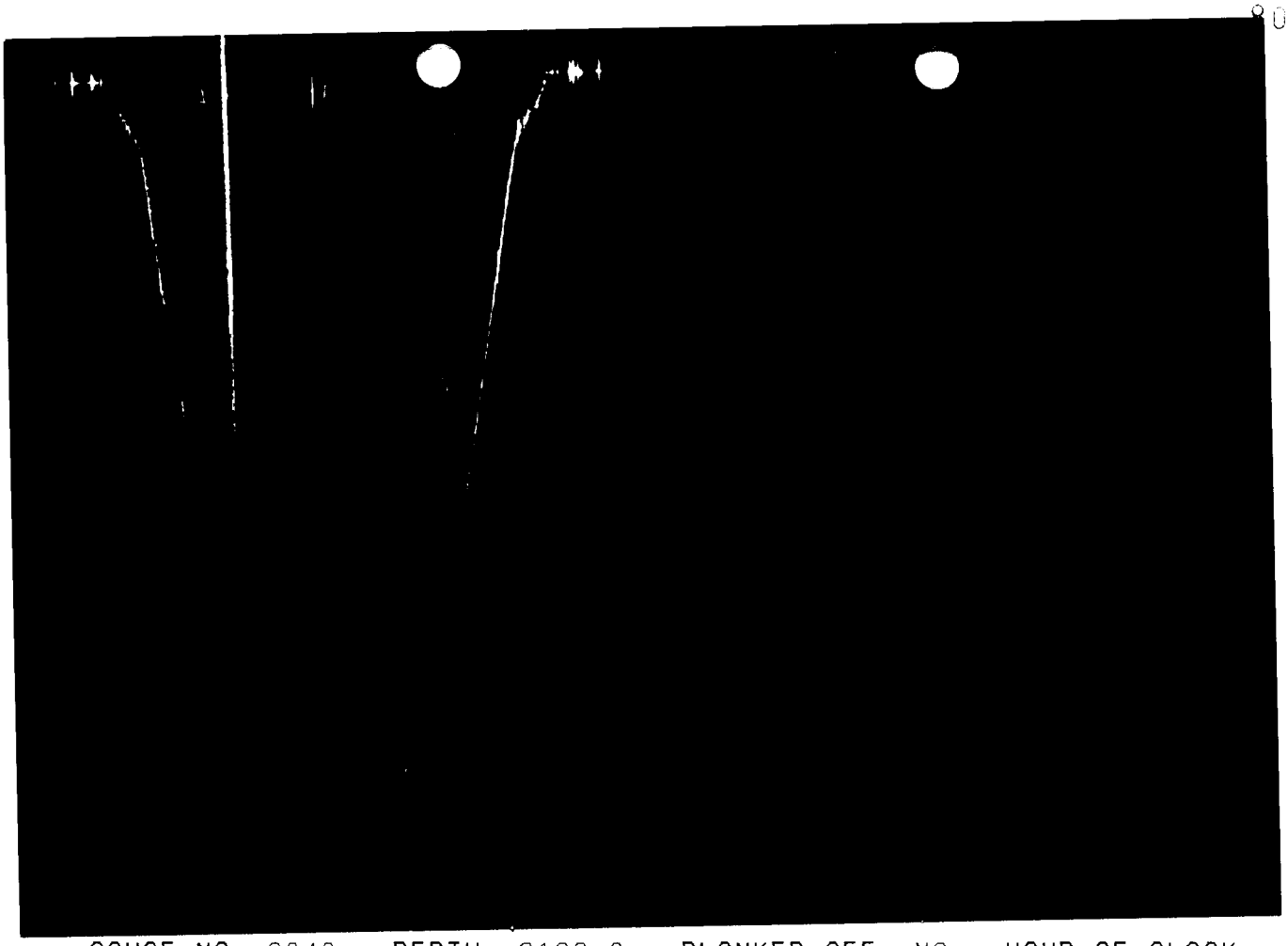
HALLIBURTON
SERVICES

TICKET NO. 69009600
27-DEC-84
FARMINGTON

FORMATION TESTING SERVICE REPORT

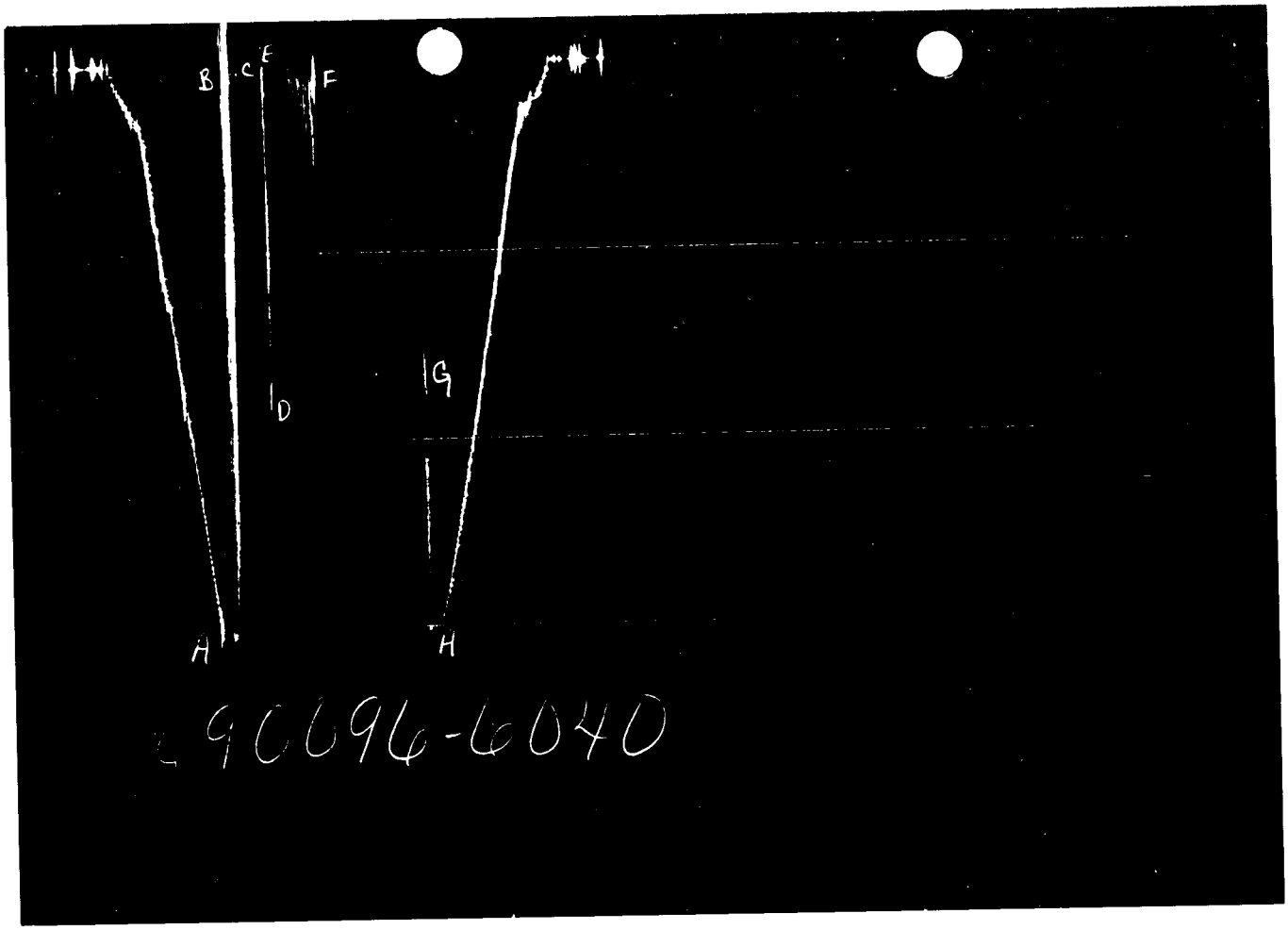
LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
3-33S-25E	WILDCAT	SAN JUAN	UTAH BG

IRON SPRINGS	1-3	4	6204.' - 6339.'	TRANSCO EXPLORATION COMPANY
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME



GAUGE NO: 6040 DEPTH: 6183.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3061	3015.1			
B	INITIAL FIRST FLOW	41	40.7	15.0	14.9	F
C	FINAL FIRST FLOW	41	40.7			
C	INITIAL FIRST CLOSED-IN	41	40.7	30.0	28.9	C
D	FINAL FIRST CLOSED-IN	1791	1783.4			
E	INITIAL SECOND FLOW	41	48.1	60.0	62.1	F
F	FINAL SECOND FLOW	68	60.7			
F	INITIAL SECOND CLOSED-IN	68	60.7	120.0	119.1	C
G	FINAL SECOND CLOSED-IN	1656	1660.3			
H	FINAL HYDROSTATIC	3007	3014.3			



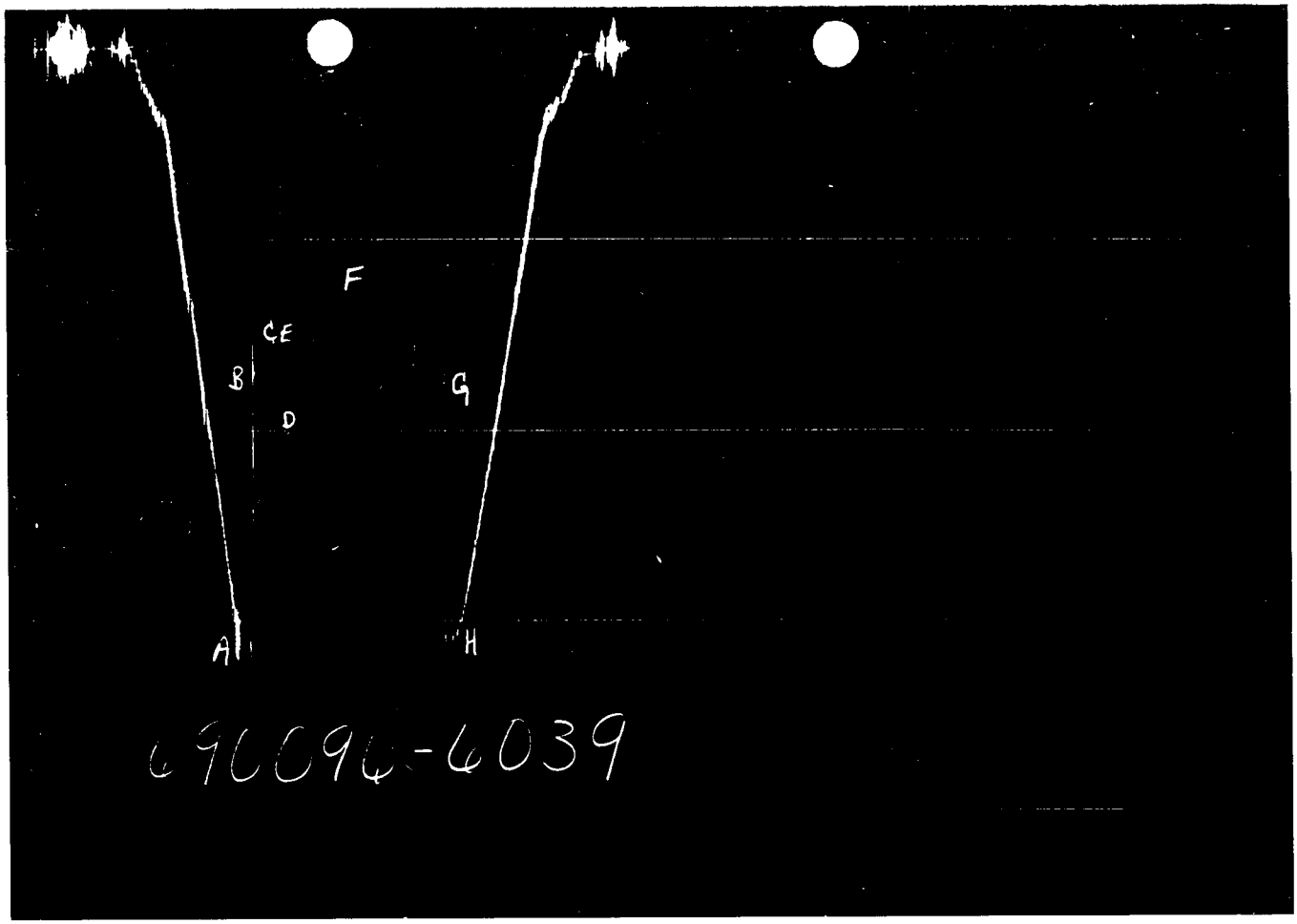
90096-6040

PRESSURE

REPORTED CALCULATED

TIME

REPORTED CALCULATED



690090-6039

ID	PRESSURE REPORTED	PRESSURE CALCULATED	TIME REPORTED	TIME CALCULATED

GAUGE NO: 6039 DEPTH: 6336.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	3166	3105.7			
B	INITIAL FIRST FLOW	1708	1689.2	15.0	14.9	F
C	FINAL FIRST FLOW	1573	1575.2			
C	INITIAL FIRST CLOSED-IN	1573	1575.2	30.0	28.9	C
D	FINAL FIRST CLOSED-IN	1869	1864.6			
E	INITIAL SECOND FLOW	1600	1600.4	60.0	62.1	F
F	FINAL SECOND FLOW	1290	1283.4			
F	INITIAL SECOND CLOSED-IN	1290	1283.4	120.0	119.1	C
G	FINAL SECOND CLOSED-IN	1737	1748.0			
H	FINAL HYDROSTATIC	3112	3104.2			

EQUIPMENT & HOLE DATA

FORMATION TESTED: DESERT CREEK
NET PAY (ft): 8.0
GROSS TESTED FOOTAGE: 135.0
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 6742
TOTAL DEPTH (ft): 6339.0
PACKER DEPTH(S) (ft): 6198, 6204
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 9.30
MUD VISCOSITY (sec): 47
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 154 @ 6335.0 ft

TICKET NUMBER: 69009600

DATE: 12-20-84 TEST NO: 4

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: AULD

WITNESS: ADRAINS

DRILLING CONTRACTOR: COLEMAN #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
PIT	0.506 @ 53 °F	9000 ppm
TOP	0.227 @ 57 °F	23000 ppm
BOTTOM	0.226 @ 56 °F	23000 ppm
SAMPLER	0.369 @ 54 °F	12700 ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE: 38
cu.ft. OF GAS: 0.00
cc OF OIL: 0
cc OF WATER: 0
cc OF MUD: 0
TOTAL LIQUID cc: 2240

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

75' OF MUD

MEASURED FROM TESTER VALVE

REMARKS:

CHARTS INDICATE SEVERE PLUGGING OF ANCHOR PERFORATIONS DURING THE FLOW PERIODS.

TYPE & SIZE MEASURING DEVICE: ____________________ TICKET NO: 69009600

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-19-84					
2341					ON LOCATION
12-20-84					
0300					PICKED UP TOOL
0500					TOOL ON TRIP IN
0726	1/8BH	0			OPENED TOOL
0741	"	"			CLOSED TOOL
0811	"	"			OPENED TOOL
0846	"	"			DEAD
0911	"	"			CLOSED TOOL
1111					OPENED BY-PASS
1640					JOB COMPLETED.

TICKET NO: 69009600

CLOCK NO: 12118 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 6040

DEPTH: 6183.0

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	40.7			
C	2	14.9	40.7	0.0		
			FIRST CLOSED-IN			
C	1	0.0	40.7			
	2	2.0	246.3	205.6	1.8	0.921
	3	4.0	1310.7	1270.0	3.2	0.672
	4	6.0	1545.6	1504.9	4.3	0.539
	5	8.0	1585.4	1544.7	5.2	0.457
	6	10.0	1616.9	1576.2	6.0	0.395
	7	12.0	1641.9	1601.2	6.6	0.350
	8	14.0	1665.3	1624.6	7.2	0.314
	9	16.0	1685.5	1644.8	7.7	0.286
	10	18.0	1705.9	1665.2	8.1	0.262
	11	20.0	1723.4	1682.7	8.5	0.241
	12	22.0	1739.7	1699.0	8.9	0.225
	13	24.0	1755.6	1714.9	9.2	0.209
	14	26.0	1770.7	1730.0	9.5	0.196
D	15	28.9	1783.4	1742.7	9.8	0.180
			SECOND FLOW			
E	1	0.0	48.1			
	2	10.0	50.9	2.8		
	3	20.0	54.4	3.5		
	4	30.0	62.3	7.8		
	5	40.0	79.3	17.0		
	6	50.0	95.1	15.8		
F	7	62.1	60.7	-34.5		
			SECOND CLOSED-IN			
F	1	0.0	60.7			
	2	5.0	1220.6	1160.0	4.7	1.217
	3	10.0	1260.0	1199.3	8.9	0.939
	4	15.0	1291.1	1230.5	12.6	0.787
	5	20.0	1319.3	1258.7	15.9	0.685
	6	25.0	1346.4	1285.7	18.9	0.610
	7	30.0	1370.3	1309.6	21.6	0.553
	8	35.0	1393.2	1332.5	24.0	0.505
	9	40.0	1415.4	1354.8	26.3	0.466
	10	45.0	1435.4	1374.7	28.4	0.433
	11	50.0	1455.5	1394.8	30.3	0.405
	12	55.0	1474.2	1413.5	32.1	0.380
	13	60.0	1491.7	1431.0	33.7	0.358
	14	65.0	1508.8	1448.2	35.2	0.339
	15	70.0	1526.1	1465.4	36.7	0.322
	16	75.0	1542.5	1481.9	38.0	0.307

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	17	80.0	1558.7	1498.0	39.2	0.293
	18	85.0	1573.9	1513.3	40.4	0.280
	19	90.0	1588.6	1528.0	41.5	0.269
	20	95.0	1603.6	1542.9	42.5	0.258
	21	100.0	1616.8	1556.1	43.5	0.248
	22	105.0	1630.0	1569.3	44.4	0.239
	23	110.0	1642.3	1581.6	45.3	0.230
	24	115.0	1653.6	1592.9	46.1	0.223
G	25	119.1	1660.3	1599.7	46.8	0.216

REMARKS:

TICKET NO: 69009600	GAUGE NO: 6039
CLOCK NO: 9756 HOUR: 24	DEPTH: 6336.0

HALLIBURTON SERVICES

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
			FIRST FLOW			
B	1	0.0	1689.2			
C	2	14.9	1575.2	-114.0		
			FIRST CLOSED-IN			
C	1	0.0	1575.2			
	2	2.0	1606.5	31.3	1.7	0.930
	3	4.0	1641.9	66.7	3.1	0.674
	4	6.0	1671.7	96.5	4.3	0.541
	5	8.0	1695.6	120.4	5.2	0.457
	6	10.0	1717.7	142.5	6.0	0.397
	7	12.0	1737.6	162.4	6.6	0.351
	8	14.0	1756.9	181.6	7.2	0.314
	9	16.0	1773.5	198.3	7.7	0.286
	10	18.0	1790.1	214.8	8.1	0.261
	11	20.0	1804.3	229.1	8.5	0.241
	12	22.0	1818.5	243.3	8.9	0.224
	13	24.0	1832.2	257.0	9.2	0.210
	14	26.0	1845.6	270.4	9.5	0.196
D	15	28.9	1864.6	289.4	9.8	0.180
			SECOND FLOW			
E	1	0.0	1600.4			
F	2	62.1	1283.4	-317.0		
			SECOND CLOSED-IN			
F	1	0.0	1283.4			
	2	5.0	1326.1	42.7	4.7	1.216
	3	10.0	1357.8	74.4	8.8	0.940
	4	15.0	1385.0	101.5	12.5	0.788
	5	20.0	1411.5	128.0	15.9	0.685
	6	25.0	1437.4	153.9	18.9	0.610
	7	30.0	1460.5	177.0	21.6	0.552
	8	35.0	1482.9	199.5	24.1	0.505
	9	40.0	1504.3	220.8	26.3	0.466
	10	45.0	1523.6	240.2	28.4	0.433
	11	50.0	1542.2	258.7	30.3	0.405
	12	55.0	1560.6	277.1	32.1	0.380
	13	60.0	1580.4	296.9	33.7	0.358
	14	65.0	1598.1	314.7	35.3	0.339
	15	70.0	1614.7	331.3	36.7	0.322
	16	75.0	1629.2	345.8	38.0	0.307
	17	80.0	1645.1	361.6	39.2	0.293
	18	85.0	1659.4	376.0	40.4	0.280
	19	90.0	1673.8	390.3	41.5	0.268
	20	95.0	1687.9	404.4	42.5	0.258
	21	100.0	1700.2	416.7	43.5	0.248

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
		SECOND CLOSED-IN - CONTINUED				
	22	105.0	1713.7	430.3	44.4	0.239
	23	110.0	1725.8	442.3	45.3	0.230
	24	115.0	1737.8	454.4	46.1	0.223
G	25	119.1	1748.0	464.5	46.8	0.216

REMARKS:

TICKET NO. 69009600

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5416.0	
4	FLEX WEIGHT.....	4.500	2.764	119.0	
3	DRILL COLLARS.....	6.250	2.250	571.0	
51	PUMP OUT REVERSING SUB.....	6.000	3.000	1.0	6107.0
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	6108.0
3	DRILL COLLARS.....	6.250	2.250	61.0	
5	CROSSOVER.....	6.000	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	6181.0
80	AP RUNNING CASE.....	5.000	2.250	4.0	6183.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	6198.0
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	6204.0
5	CROSSOVER.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.250	92.0	
5	CROSSOVER.....	6.000	3.000	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	2.500	35.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.0	6336.0
	TOTAL DEPTH				6339.0

EQUIPMENT DATA

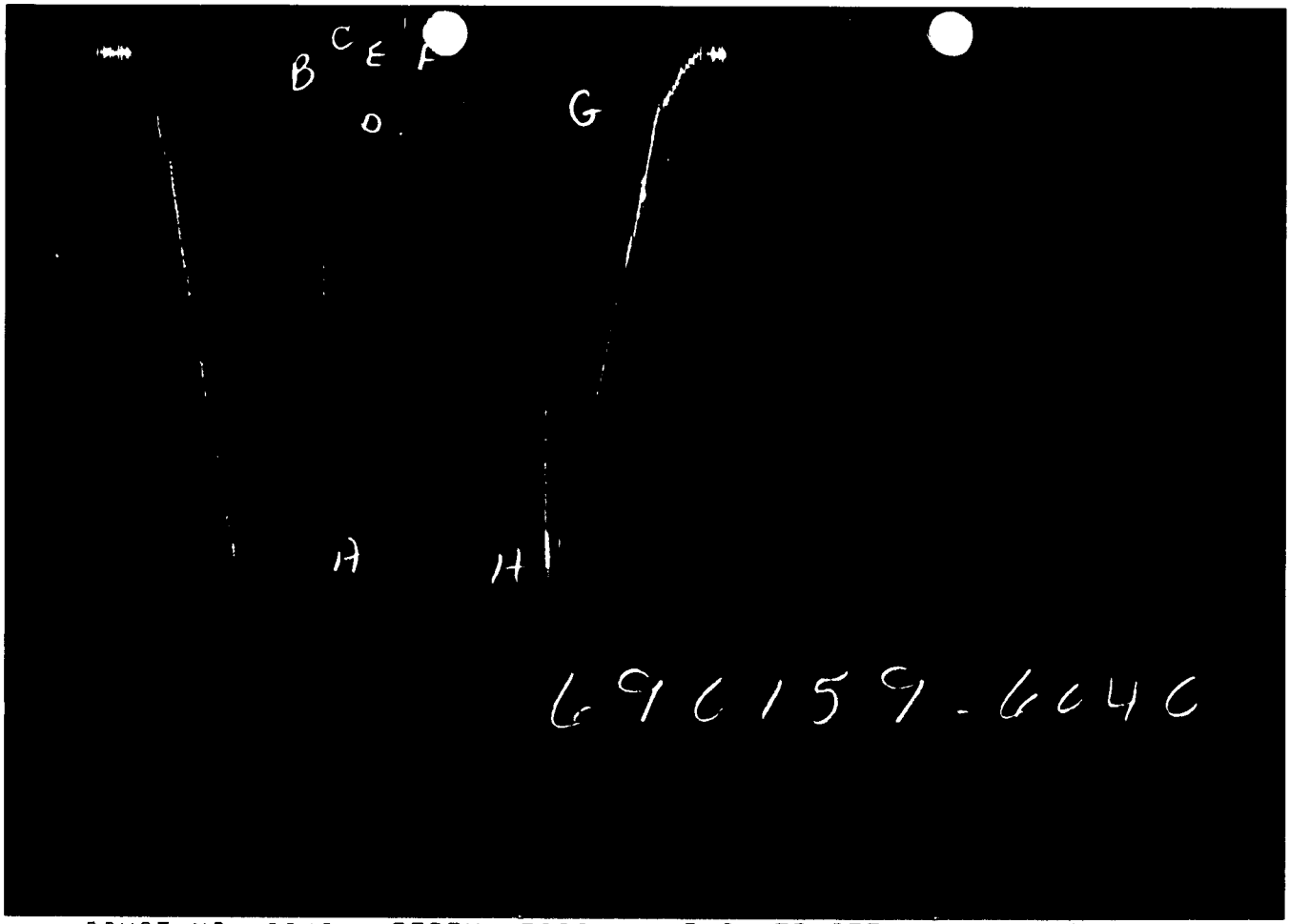
TICKET NO. 69015900
20-DEC-84
FARMINGTON

FORMATION TESTING SERVICE REPORT

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
3-33S-25E	WILDCAT	SAN JUAN	UTAH

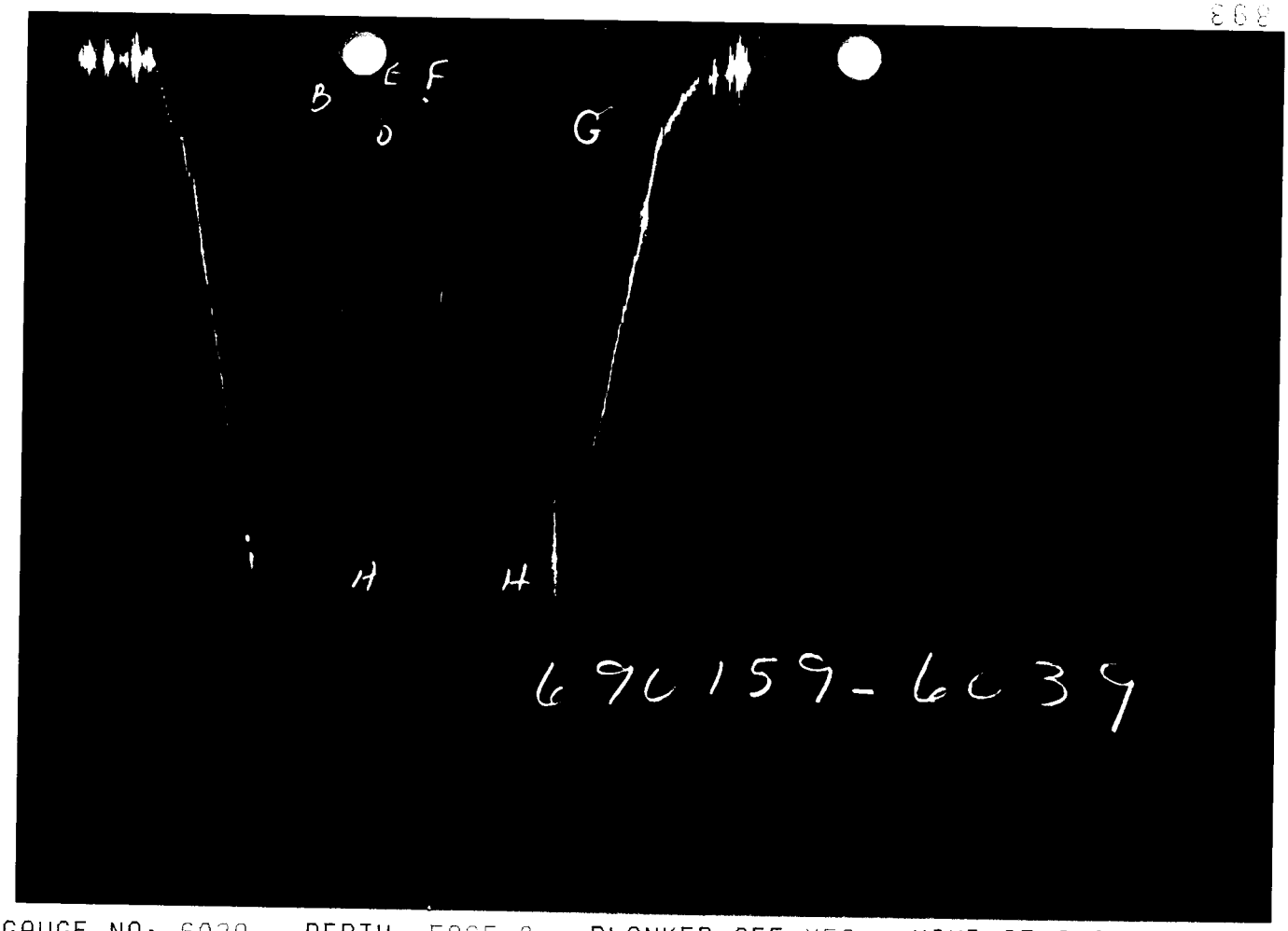
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
IRON SPRINGS	1-3	3	5830.' - 5968.'	TRANSCO EXPLORATION COMPANY

DR



GAUGE NO: 6040 DEPTH: 5809.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2641	2633.0			
B	INITIAL FIRST FLOW	27	42.5	17.0	17.0	F
C	FINAL FIRST FLOW	54	63.9			
C	INITIAL FIRST CLOSED-IN	54	63.9	28.0	28.0	C
D	FINAL FIRST CLOSED-IN	162	178.4			
E	INITIAL SECOND FLOW	81	88.6	60.0	60.0	F
F	FINAL SECOND FLOW	135	121.3			
F	INITIAL SECOND CLOSED-IN	135	121.3	150.0	150.0	C
G	FINAL SECOND CLOSED-IN	270	290.0			
H	FINAL HYDROSTATIC	2641	2612.8			



GAUGE NO: 6039 DEPTH: 5965.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2690	2704.7			
B	INITIAL FIRST FLOW	54	113.9	17.0	17.0	F
C	FINAL FIRST FLOW	107	136.5			
C	INITIAL FIRST CLOSED-IN	107	136.5	28.0	28.0	C
D	FINAL FIRST CLOSED-IN	215	240.9			
E	INITIAL SECOND FLOW	107	154.7	60.0	60.0	F
F	FINAL SECOND FLOW	188	185.7			
F	INITIAL SECOND CLOSED-IN	188	185.7	150.0	150.0	C
G	FINAL SECOND CLOSED-IN	322	357.1			
H	FINAL HYDROSTATIC	2690	2685.0			

EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY
NET PAY (ft):
GROSS TESTED FOOTAGE: 138.0
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 6864
TOTAL DEPTH (ft): 5968.0
PACKER DEPTH(S) (ft): 5824, 5830
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.90
MUD VISCOSITY (sec): 42
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): 138 @ 5964.0 ft

TICKET NUMBER: 69015900

DATE: 12-15-84 TEST NO: 3

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: BELL / FOSTER

WITNESS: LONG

DRILLING CONTRACTOR: COLEMAN #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
MUD PIT	3.460 @ 60 °F		455 ppm
DRILL PIPE	4.180 @ 55 °F		394 ppm
SAMPLER	4.360 @ 58 °F		333 ppm
	@ °F		ppm
	@ °F		ppm
	@ °F		ppm

SAMPLER DATA

Psig AT SURFACE: 54
cu.ft. OF GAS: 0.24
cc OF OIL: 0
cc OF WATER: 0
cc OF MUD: 900
TOTAL LIQUID cc: 900

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): @ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

250' OF GAS CUT MUD

MEASURED FROM TESTER VALVE

REMARKS:

REPORTED ELEVATION MEASURED AT GROUND LEVEL IS 6742'

TYPE & SIZE MEASURING DEVICE: TESTING MANIFOLD | TICKET NO: 69015900

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-15-84					
0340					ON LOCATION
0400					PICKED UP TOOLS
0500					STARTED TOOLS IN HOLE
0855	.125				OPENED TOOL WITH A WEAK BLOW
0912					CLOSED TOOL WITH A WEAK BLOW
0940					OPENED TOOL WITH A WEAK BLOW
					THROUGHOUT FLOW PERIOD.
1040					CLOSED TOOL WITH A WEAK BLOW
1310					OPENED BYPASS
1315					TRIPPED OUT OF HOLE.
1800					TOOL OUT AND LAID DOWN

TICKET NO. 69015900

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	5049.0	
4	FLEX WEIGHT.....	4.500	2.764	119.0	
3	DRILL COLLARS.....	6.250	2.250	536.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	5705.0
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	6.000	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.030	0.870	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5807.0
80	AP RUNNING CASE.....	5.000	2.250	4.0	5809.0
15	JAR.....	5.030	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	5824.0
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	5830.0
5	CROSSOVER.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.250	94.0	
5	CROSSOVER.....	6.000	3.000	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	3.000	36.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.0	5965.0
	TOTAL DEPTH				5968.0

EQUIPMENT DATA

TICKET NO. 69015800

20-DEC-84

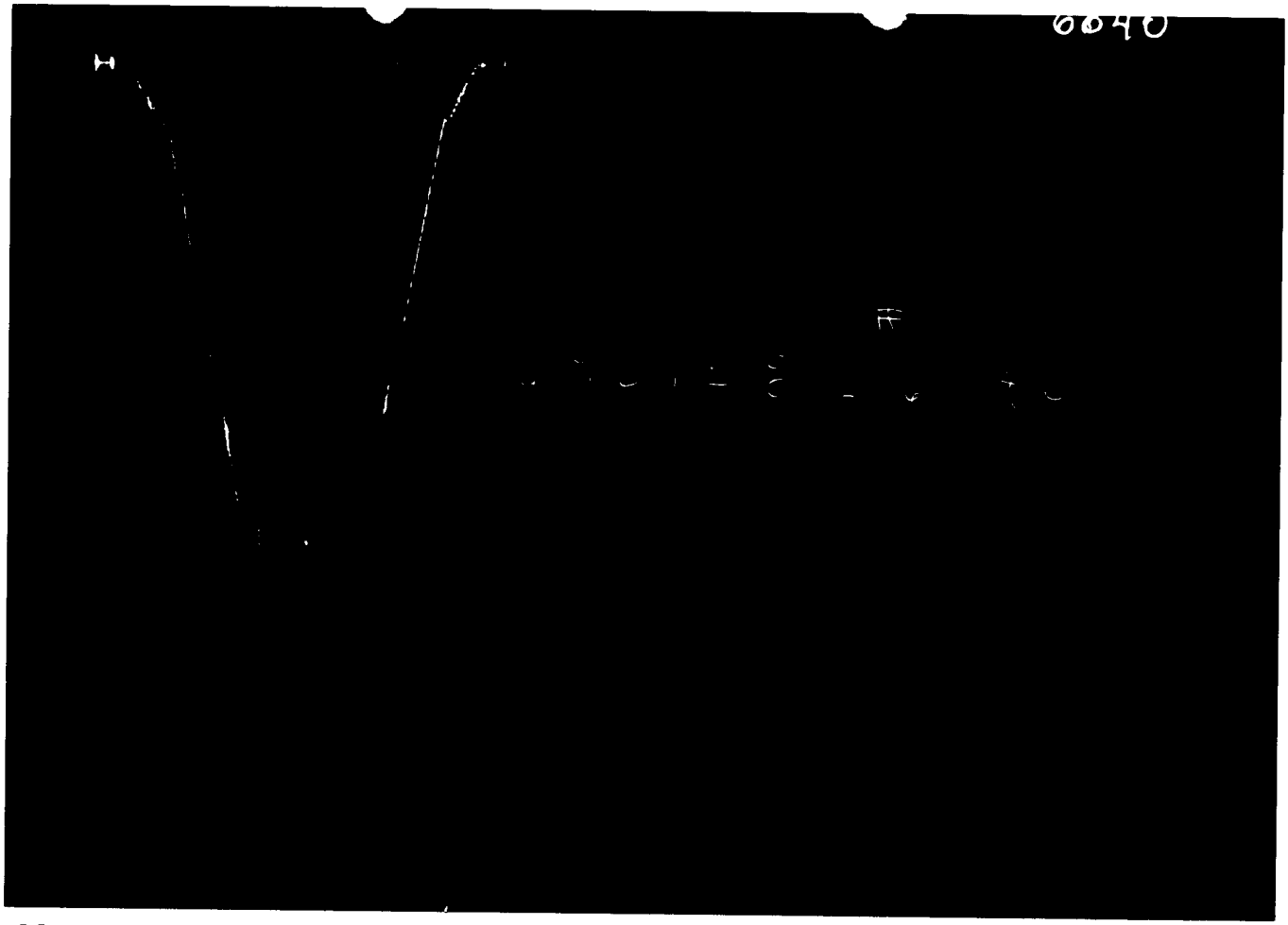
FARMINGTON

FORMATION TESTING SERVICE REPORT

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE
3-33S-25E	WILDCAT	SAN JAUN	UTAH

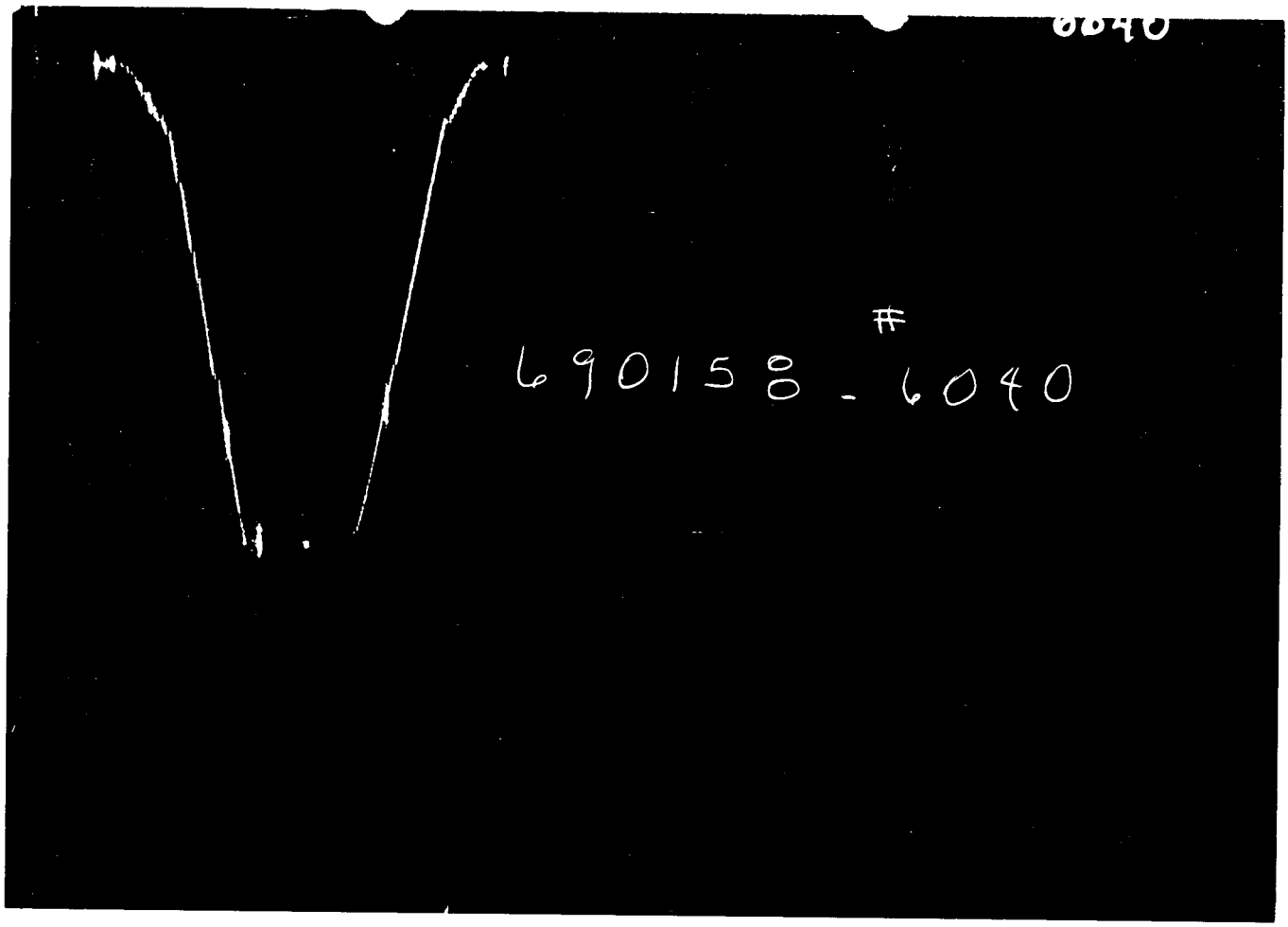
LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL	LEASE OWNER/COMPANY NAME
IRON SPRINGS	1-3	2		TRANSCO EXPLORATION COMPANY

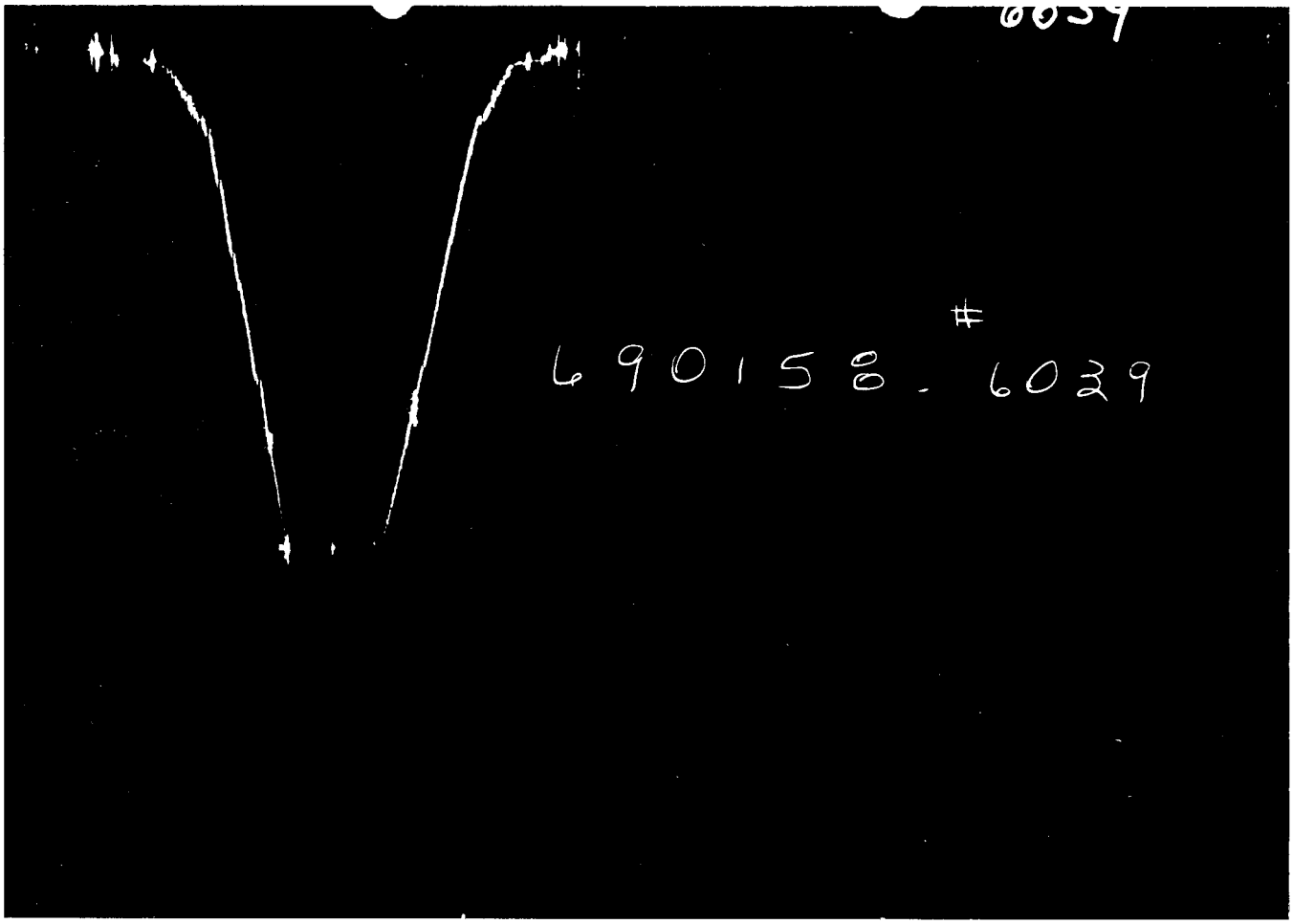
KP



GAUGE NO: 6040 DEPTH: _____ BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					


6040
690158 - 6040


6039
690158 # 6029

GAUGE NO: 6039 DEPTH: _____ BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC					

EQUIPMENT & HOLE DATA

FORMATION TESTED: LOWER ISMAY
NET PAY (ft):
GROSS TESTED FOOTAGE:
ALL DEPTHS MEASURED FROM: KELLY BUSHING
CASING PERFS. (ft):
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 6864
TOTAL DEPTH (ft): 5968.0
PACKER DEPTH(S) (ft):
FINAL SURFACE CHOKE (in):
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.70
MUD VISCOSITY (sec): 37
ESTIMATED HOLE TEMP. (°F):
ACTUAL HOLE TEMP. (°F): ___ @ _____ ft

TICKET NUMBER: 69015800

DATE: 12-14-84 TEST NO: 2

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: HOWARD BELL / DOUG FOSTER

WITNESS: MR. LONG

DRILLING CONTRACTOR: COLEMAN RIG #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY	CHLORIDES
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm
	@ °F	ppm

SAMPLER DATA

Psig AT SURFACE:
cu.ft. OF GAS:
cc OF OIL:
cc OF WATER:
cc OF MUD:
TOTAL LIQUID cc:

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ___ °F
GAS/OIL RATIO (cu.ft. per bbl):
GAS GRAVITY:

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

MEASURED FROM TESTER VALVE

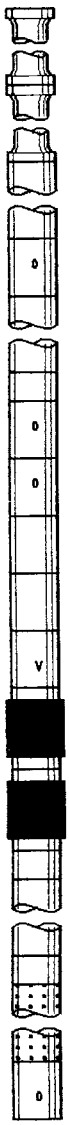
REMARKS:

MISRUN--->COULD NOT GET TO BOTTOM WITH TOOLS-LACKED 300'.
ATTEMPTED TO TEST FROM 5830'-5968'.

TYPE & SIZE MEASURING DEVICE: TESTING MANIFOLD

TICKET NO: 69015800

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-14-84					
0130					ON LOCATION
0230					PICK UP TOOLS
0430					TRIP TOOLS IN HOLE
0700					RIG BROKE DOWN
0745					TRIP IN HOLE-HIT BRIDGES 300'
					FROM TOTAL DEPTH
0835					TRIP OUT OF HOLE
1200					OUT OF HOLE-RELEASED FROM
					LOCATION



		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826		
4	FLEX WEIGHT.....	4.500	2.764	119.0	
3	DRILL COLLARS.....	6.250	2.250		
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.250	90.0	
5	CROSSOVER.....	6.000	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.030	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	
80	AP RUNNING CASE.....	5.000	2.250	4.0	
15	JAR.....	5.030	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	
70	OPEN HOLE PACKER.....	6.750	1.530	6.0	
5	CROSSOVER.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.250	94.0	
5	CROSSOVER.....	6.000	3.000	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	3.000	36.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.0	
	TOTAL DEPTH				5968.0

EQUIPMENT DATA

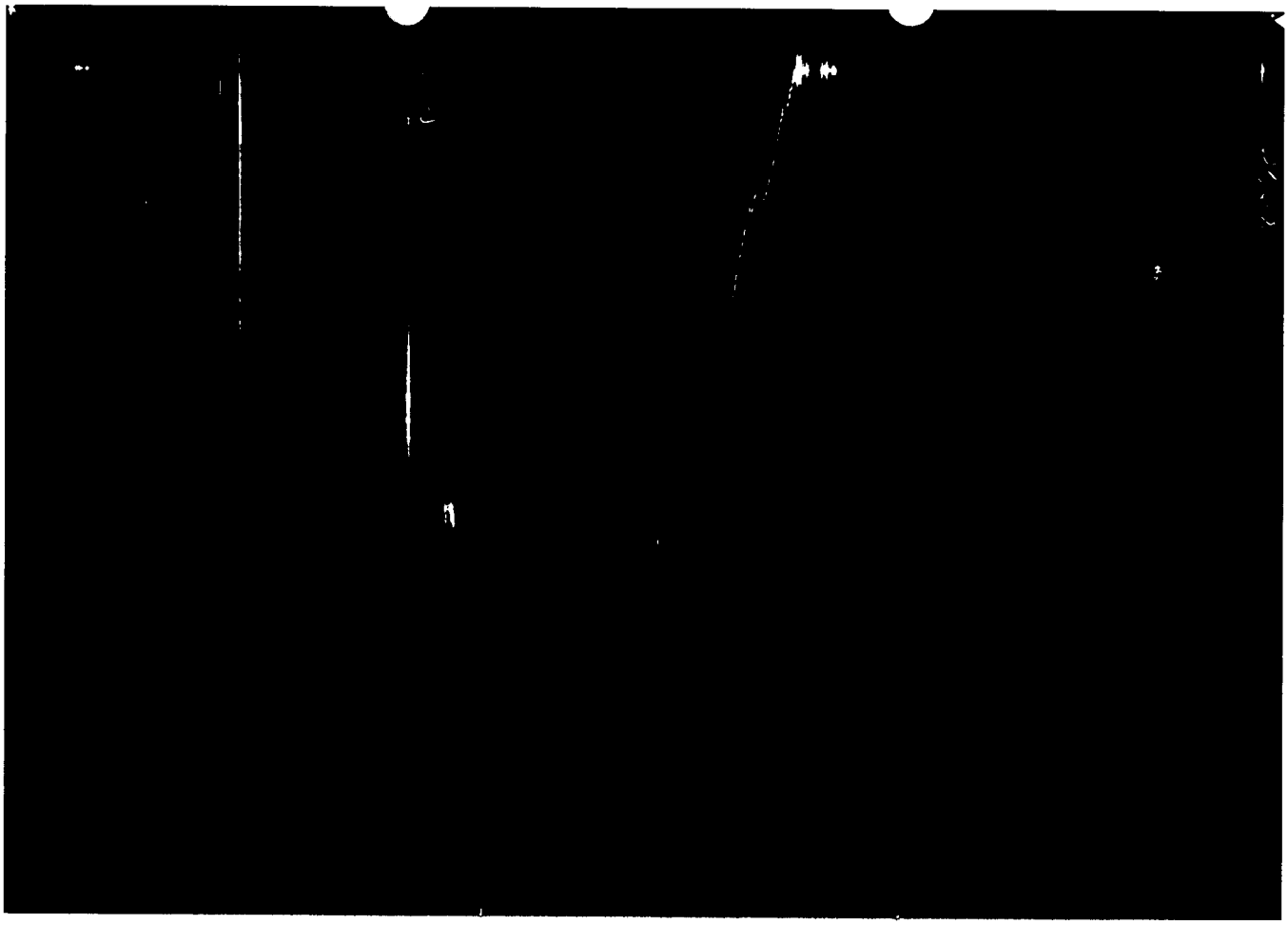
b/c

LEGAL LOCATION SEC. - TWP. - RNG.	FIELD AREA	COUNTY	STATE	LEASE OWNER/COMPANY NAME
3-33S-25E	WILDCAT	SAN JUAN	UTAH	TRANSCO OIL COMPANY

LEASE NAME	WELL NO.	TEST NO.	TESTED INTERVAL
IRON SPRINGS	1-3	1	5680.' - 5790.'

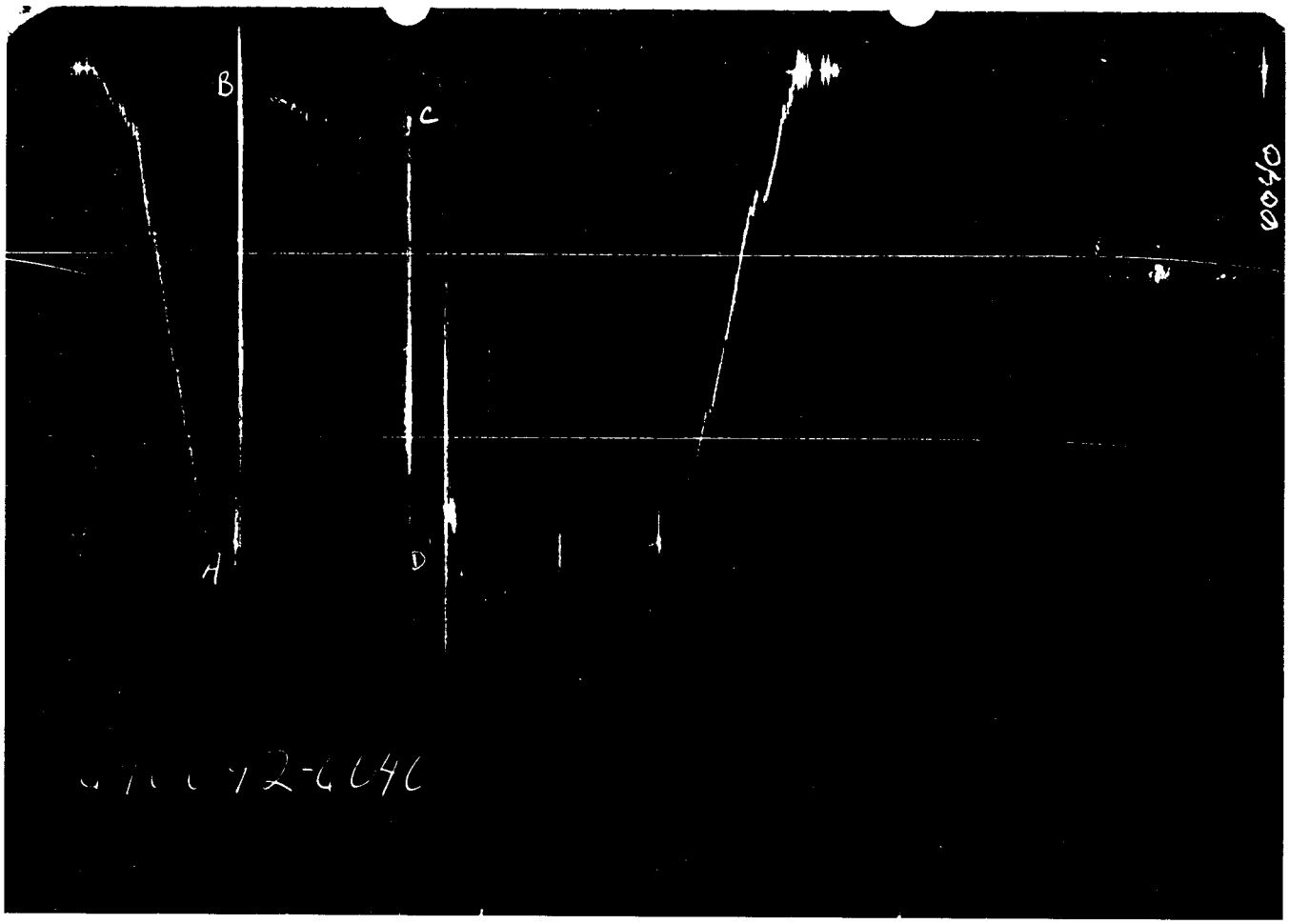
TICKET NO. 69009200
18-DEC-84
FARMINGTON

FORMATION TESTING SERVICE REPORT



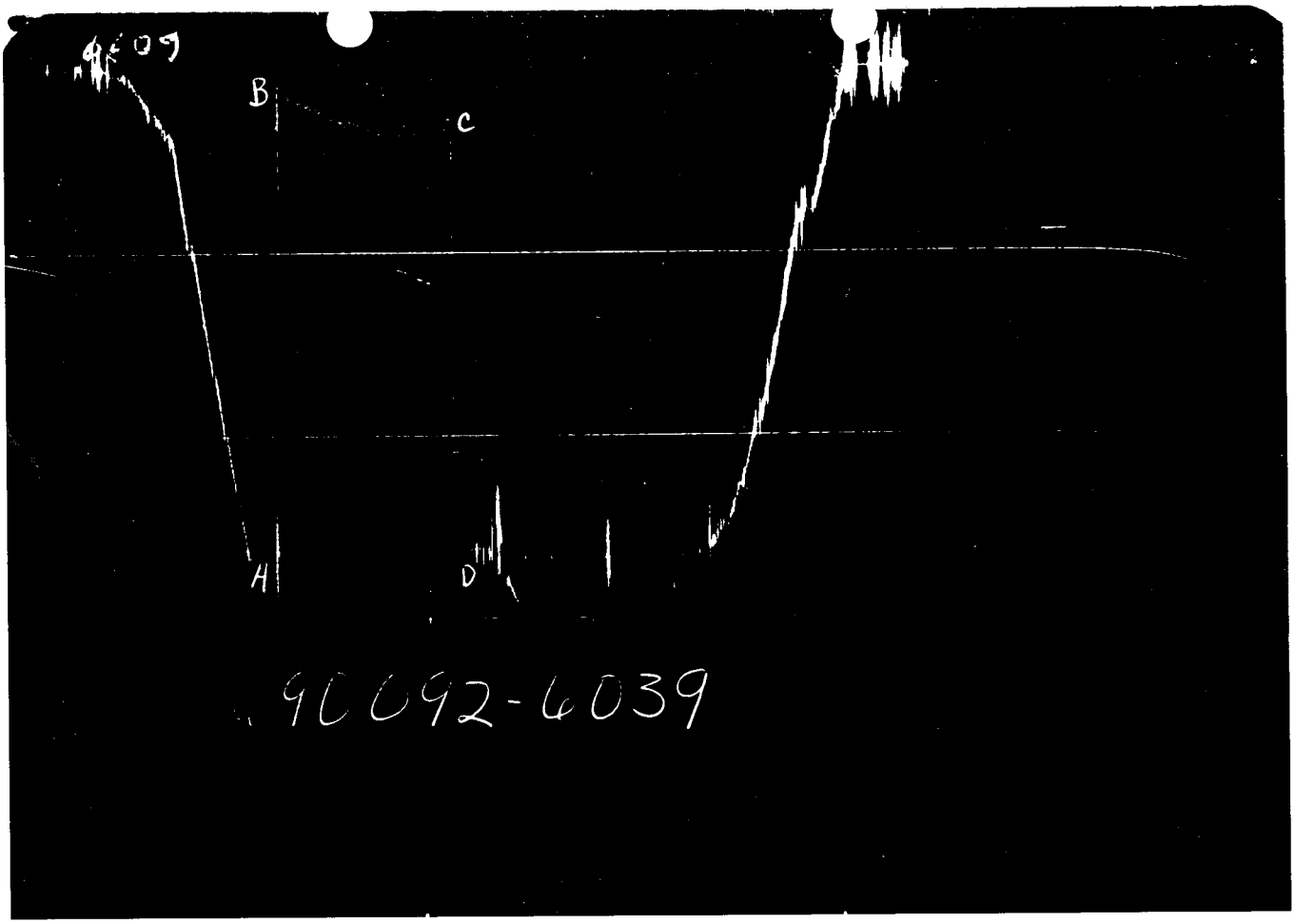
GAUGE NO: 6040 DEPTH: 5659.0 BLANKED OFF: NO HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2574	2580.8			
B	INITIAL FIRST FLOW	68	40.1	210.0	210.0	F
C	FINAL FIRST FLOW	257	262.7			
D	FINAL HYDROSTATIC	2547	2558.1			



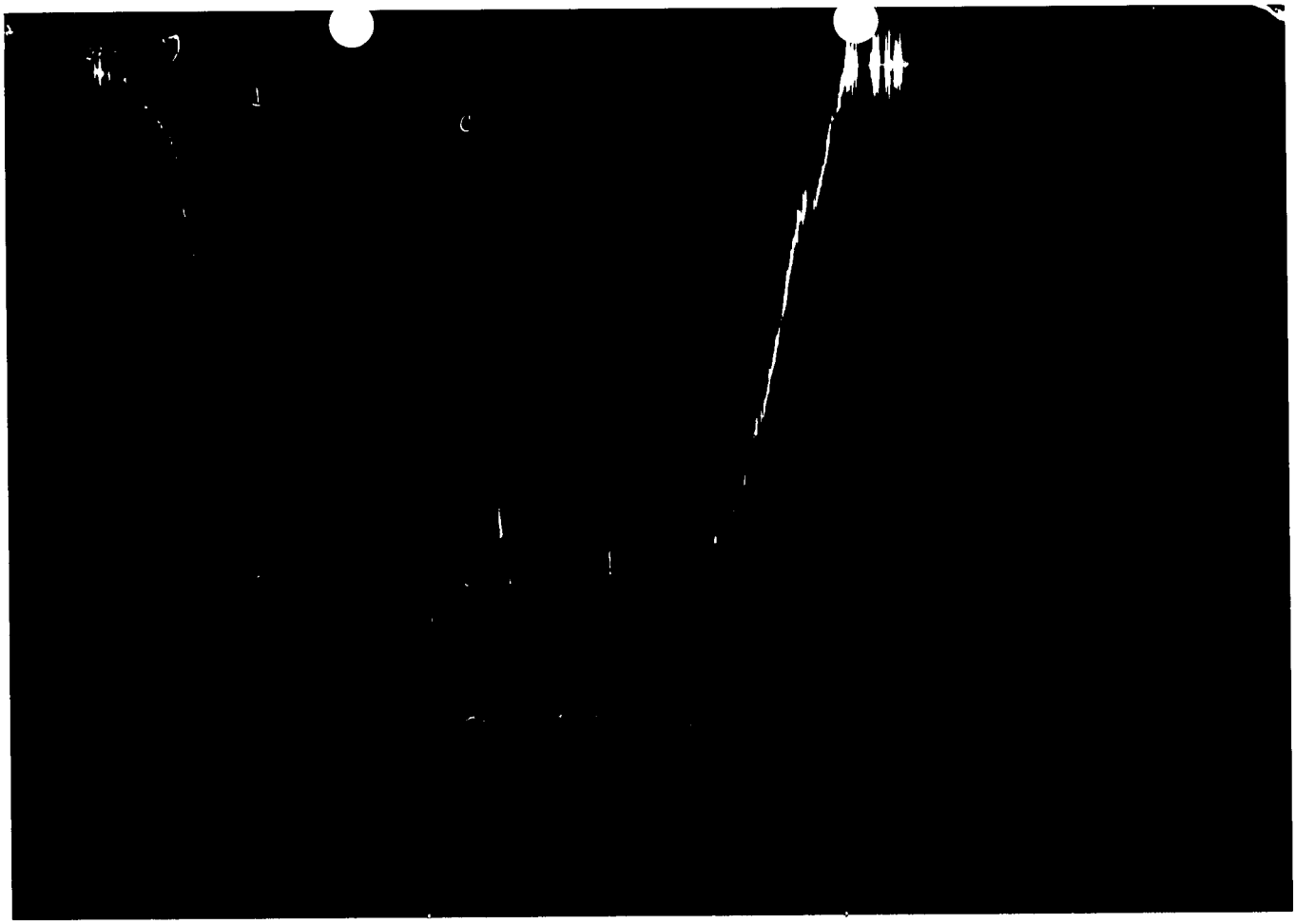
GAUGE NO. [illegible] DEPTH: [illegible] BLANKED OFF: [illegible] HOUR OF CLOCK: [illegible]

ID	DESCRIPTION	PRESSURE REPORTED	PRESSURE CALCULATED	TIME REPORTED	TIME CALCULATED	TYPE
A	[illegible]	2574	2550.8			
B	[illegible]	60	40.1	210.0	210.0	1
C	[illegible]	2577	2582.7			
D	[illegible]	2547	2546.1			



GAUGE NO: [illegible] DEPTH: [illegible] BLANKED OFF: [illegible] HOUR OF CLOCK: [illegible]

ID	DESCRIPTION	PRESSURE REPORTED	PRESSURE CALCULATED	TIME REPORTED	TIME CALCULATED	TYPE
A	[illegible]	2050	2041.6			
B	[illegible]	81	95.4	210.0	210.0	I
C	[illegible]	255	255.1			
D	[illegible]	2505	2518.4			



GAUGE NO: 6039 DEPTH: 5787.0 BLANKED OFF: YES HOUR OF CLOCK: 24

ID	DESCRIPTION	PRESSURE		TIME		TYPE
		REPORTED	CALCULATED	REPORTED	CALCULATED	
A	INITIAL HYDROSTATIC	2652	2641.8			
B	INITIAL FIRST FLOW	81	95.4	210.0	210.0	F
C	FINAL FIRST FLOW	255	293.1			
D	FINAL HYDROSTATIC	2585	2618.5			

EQUIPMENT & HOLE DATA

FORMATION TESTED: _____
NET PAY (ft): _____
GROSS TESTED FOOTAGE: 110.0
ALL DEPTHS MEASURED FROM: KB
CASING PERFS. (ft): _____
HOLE OR CASING SIZE (in): 8.750
ELEVATION (ft): 6768
TOTAL DEPTH (ft): 5790.0
PACKER DEPTH(S) (ft): 5674, 5680
FINAL SURFACE CHOKE (in): _____
BOTTOM HOLE CHOKE (in): 0.750
MUD WEIGHT (lb/gal): 8.60
MUD VISCOSITY (sec): 43
ESTIMATED HOLE TEMP. (°F): _____
ACTUAL HOLE TEMP. (°F): 135 @ 5786.0 ft

TICKET NUMBER: 69009200

DATE: 12-10-84 TEST NO: 1

TYPE DST: OPEN HOLE

HALLIBURTON CAMP: FARMINGTON

TESTER: AULD / FOSTER

WITNESS: LONG

DRILLING CONTRACTOR: COLEMAN #3

FLUID PROPERTIES FOR RECOVERED MUD & WATER

SOURCE	RESISTIVITY		CHLORIDES
PIT	3.620 @	61 °F	450 ppm
SAMPLER	1.310 @	61 °F	1360 ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm
	@	°F	ppm

SAMPLER DATA

Psig AT SURFACE: 30
cu.ft. OF GAS: 0.11
cc OF OIL: 0
cc OF WATER: 900
cc OF MUD: 400
TOTAL LIQUID cc: 1300

HYDROCARBON PROPERTIES

OIL GRAVITY (°API): _____ @ ____°F
GAS/OIL RATIO (cu.ft. per bbl): _____
GAS GRAVITY: _____

CUSHION DATA

TYPE	AMOUNT	WEIGHT

RECOVERED:

MEASURED FROM TESTER VALVE

REMARKS:

TEST WAS RUN AS PER COMPANY MAN.

RECOVERY WAS REPORTED AS "NOT AVAILABLE".

THE 400 CC'S OF MUD IN THE SAMPLER WERE SOLIDS AND PIPE DOPE.

TYPE & SIZE MEASURING DEVICE: _____ TICKET NO: 69009200

TIME	CHOKE SIZE	SURFACE PRESSURE PSI	GAS RATE MCF	LIQUID RATE BPD	REMARKS
12-10-84					
0454					ON LOCATION WITH TOOLS
0830					PICKED UP TOOLS
0930					STARTED TOOLS IN HOLE
1255	BH				OPENED TOOL
1300		1 OZ			
1305		1 OZ			
1310		1.5 OZ			
1325		1.75 OZ			
1340		2 OZ			
1355		2 OZ			
1410		2 OZ			
1425		2 OZ			
1440		1.5 OZ			
1455		2 OZ			
1510		2 OZ			
1525		3.5#			
1540		3.5#			
1555		5.25#			
1610		6.25#			
1625		9#			OPENED BY-PASS. DROPPED 2 BARS
					TO REVERSE
1712					ROTATED TOOL AND STARTED REVERS-
					ING.....PLUGGED OFF.
1813					REVERSED OUT LONG WAY
2130					TRIP OUT
12-11-84					
0945					JOB COMPLETED.

TICKET NO: 69009200

CLOCK NO: 13741 HOUR: 24

HALLIBURTON SERVICES

GAUGE NO: 6040

DEPTH: 5659.0

FIRST FLOW

REF		MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
B	1	0.0	40.1			
	2	15.0	98.2	58.1		
	3	30.0	133.0	34.7		
	4	45.0	156.9	23.9		
	5	60.0	195.0	38.1		
	6	75.0	235.7	40.7		
	7	90.0	238.8	3.1		
	8	105.0	270.2	31.4		
	9	120.0	296.4	26.2		
	10	135.0	317.1	20.7		
	11	150.0	274.3	-42.7		
	12	165.0	322.1	47.7		
	13	180.0	272.3	-49.8		
	14	195.0	333.5	61.3		
C	15	210.0	262.7	-70.8		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

TICKET NO: 69009200	GAUGE NO: 6039
CLOCK NO: 14128 HOUR: 24	DEPTH: 5787.0

HALLIBURTON SERVICES

FIRST FLOW

	REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$
B	1	0.0	95.4			
	2	15.0	156.2	60.9		
	3	30.0	192.6	36.3		
	4	45.0	220.9	28.3		
	5	60.0	251.4	30.6		
	6	75.0	291.0	99.6		
	7	90.0	296.9	5.9		
	8	105.0	323.2	26.3		
	9	120.0	352.9	29.8		
	10	135.0	371.0	18.1		
	11	150.0	309.2	-61.9		
	12	165.0	361.8	52.6		
	13	180.0	303.2	-58.6		
	14	195.0	371.7	68.6		
C	15	210.0	293.1	-78.6		

REF	MINUTES	PRESSURE	ΔP	$\frac{t \times \Delta t}{t+\Delta t}$	$\log \frac{t+\Delta t}{\Delta t}$

REMARKS:

TICKET NO. 69009200

		O.D.	I.D.	LENGTH	DEPTH
1	DRILL PIPE.....	4.500	3.826	4862.0	
4	FLEX WEIGHT.....	4.500	2.764	119.0	
3	DRILL COLLARS.....	6.250	2.500	602.0	
50	IMPACT REVERSING SUB.....	6.000	3.000	1.0	5584.0
3	DRILL COLLARS.....	6.250	2.500	61.0	
5	CROSSOVER.....	6.000	3.000	1.0	
13	DUAL CIP SAMPLER.....	5.000	0.750	7.0	
60	HYDROSPRING TESTER.....	5.000	0.750	5.0	5657.0
80	AP RUNNING CASE.....	5.000	2.250	4.0	5659.0
15	JAR.....	5.000	1.750	5.0	
16	VR SAFETY JOINT.....	5.000	1.000	3.0	
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	5674.0
70	OPEN HOLE PACKER.....	7.750	1.530	6.0	5680.0
5	CROSSOVER.....	6.000	3.000	1.0	
3	DRILL COLLARS.....	6.250	2.500	61.0	
5	CROSSOVER.....	6.000	3.000	1.0	
20	FLUSH JOINT ANCHOR.....	5.750	2.500	41.0	
81	BLANKED-OFF RUNNING CASE.....	5.750		4.0	5787.0
	TOTAL DEPTH				5790.0

EQUIPMENT DATA

TABLE OF CONTENTS

WELL SUMMARY

OPERATOR:	TRANSCO EXPLORATION CO.
WELL NAME:	IRON SPRINGS 1-3
AREA:	IRON SPRINGS
LOCATION:	SE SW, SE SEC 13 T33S R25E
KB:	6742.2'
GL:	6728.2'
COUNTY:	SAN JUAN
STATE:	UTAH
SPUD DATE:	1 DEC 1984
COMPLETION DATE:	20 DEC 1984
DRILLING CONTRACTOR:	COLEMAN DRILLING RIG #3, FARMINGTON, NM
TOOL PUSHER:	GLEN STORIE
DRILLING ENGINEER:	MIKE PATRICK, AL LONG, LEON ABRAMS
CASING:	13 3/8" CONDUCTOR TO 100': K-55 SURFACE CSG TO 2090'
PIPE:	4 1/2"
COLLARS:	6 1/4"
MUD LOGGING:	ANALEX, SCOTT GEORGE, CRISSIE BUMANGLAG, RAMON, TOME
WELL-SITE GEOLOGY:	LEE AMOROSO
ELECTRIC LOGS:	GEARHART, FARMINGTON, NM DIL/DLL/BHCS/GR/CNL-CDL/ TEMP/DIPMETER
DRILLING MUD:	NL BAROID
MUD ENGINEER:	PEN PENFIELD, GARY DUNN
CEMENTING:	HALLIBURTON, FARMINGTON, NM
DST:	HALLIBURTON, FARMINGTON, NM

WELL SUMMARY (cont'd)

OBJECTIVES:	PRIMARY: UPPER ISMAY CARBONATE SECONDARY: HONAKER TRAIL, SANDSTONE & CARBONATE, LOWER ISMAY & DESERT CREEK CARBONATES
TOTAL DEPTH:	6339'
STATUS:	P/A

WELL CHRONOLOGY

DATE DAYS	MDNT DEPTH	FT/ DAY	DAILY OPERATION
4/DEC/84 (4)	2090'	430'	CUT CSG-WELD ON WELL HEAD-PRESS TEST WELL HEAD (1500 PSI)-NIPPLE UP-TIH-TAG CMT @ 2044'-DRLG-TEST PIPE RAMS & CSG (400/1800 PSI)-DRLG-PRESS TEST-SHOE TD 12.9 P.P.G. (EMU)-DRLG
5/DEC/84 (5)	2520'	718'	SURV-TOH FOR BIT-RIG SERV-TIH-DRLG-SURV-DRLG-R&R BEARING ON ROTARY CHAIN-TOH TO CSG-W/O PARTS
6/DEC/84 (6)	32661'	661'	W/O PARTS-REPAIR RIG-TIH-DRLG-SURV-DRLG-RTG SERV
7/DEC/84 (7)	38928'	928'	DRLG-SURV (MISRUN)-DRLG-SURV-DRLG-RIG SERV-DRLG-CIRC-SURV-DRLG-GHG OIL IN SWIVEL-DRLG-ADD SHIMS IN KB-DRLG
8/DEC/84 (8)	4827'	674'	DRLG-RIG SERV-SURV-DRLG-CIRC B/U-TOH-CHG BIT-TIH-DRLG
9/DEC/84 (9)	5501'	290'	DRLG-LOC (+310 BBL)-PULL 5 STDS-MIX MUD-RUN 5 STDS IN HOLE-DRLG-LOC-MIX MUD-DRLG-CIRC SPL-TOH-SLM-SURV-P/U CORE BBL-L/D CORE BBL-W/O DST TOOLS
10/DEC/84 (10)	5791'	0'	TIH-CIRC & COND-TOH FOR DST-CUT D-LINE-P/UP TEST TOOLS-SLM W/DST TOOLS-RIG UP TOOL-TIH-RUN DST #1-TOH W/TOOLS
11/DEC/84 (11)	5791'	10'	TOH-L/D TEST TOOLS-PU CORE BBL=TIH-WASH 190' TO BOT-CORING-SHAKE OUT LCM-CORING @ 45 MIN/FT TO 5801'-TOH W/CORE BBL-REC 1' CORE-TIH W/BIT TO CLEAN HOLE-WASH TO BOT 10'
12/DEC/84 (12)	5801'	17'	CIRC & COND HOLE-TOH TO P/U CORE BBL-TIH W/CORE BBL-WASH & REAM 10' TO BOT-CORING TO 5818'-TOH-L/D CORE BBL (REC 15' CORE)-P/U BIT & DC'S.
13/DEC/84 (13)	5818'	148'	RIG REPAIR-TIH-WASH & REAM TO BOT-DRLG-CIRC B/U-DRLG-CIRC FOR DST #2-TOH
14/DEC/84 (14)	5966'	0'	TOH-W/O TESTER-P/U TEST TOOLS-WATER FROZEN IN CIRCULATING BRAKE DRUM & EXPLOSION DAMAGED IT-TIH-HIT BRIDGE @ 5648'-W/O ORDERS-TOH W/TST TOOLS-L/D TST TOOLS-TIH TO 2000' W/BIT-RPR CIRC DRUM -TIH-WASH & REAM 4 STD IN HOLE-CIRC-SHORT TRIP-CORE-TOH
15/DEC/84 (15)	5966'	335'	TOH-W/O TESTERS-P/U TEST TOOL-TIH-RIG UP TSTR RUN DST #2-TOH-L/D TOOLS-P/U BIT-TIH-DRLG

16/DEC/84 (16)	6004'	335'	DRLG-LOC @ 6015' (100 BBL)-DRLG-LOST CIRC (100 BBL)-SHORT TRIP-CIRC B/U-TOH TO LOG
17/DEC/84 (17)	6339'	0'	W/O GEARHART-RIG UP LOGGER-LOGGERS REPAIRING EQUIPMENT ORDER OUT NEW LOGGING TRUCK-TIH-CIRC & WASH-TOH TO LOG-R/U GEARHART-LOGGING-TOOL WOULDN'T GO PAST 6230'-PULL OUT LOGGING TOOLS-M/U BIT & TIH-TAG BRIDGE @ 6287'
18/DEC/84	6339'	0'	CIRC & RAISE MUD WT TO 9.3-TOH TO LOG-RIG UP GEARHART-LOGGING-HIT OBSTRUCTION @ 6180'-TIH W/BIT-WASH & REAM TO BOT-CIRC & COND-TOH-CHAIN OUT-RIG UP LOGGERS
19/DEC/84 (19)	6339'	0'	LOGGING-RIG DN LOGGERS-W/O ORDERS-TIH FOR WIPER TRIP-CIRC & COND-TOH
20/DEC/84 (20)	6339'	0'	TOH-P/U DST TOOLS-RUN DST #3-TOH W/DST TOOLS-L/D DST TOOLS-W/O ORDERS-P & A

BIT RECORD

BIT NUMBER	SIZE	MAKE	TYPE	DEPTH OUT	FEET	HOURS	FEET/HR
1RR	12 1/4	STC	F-3	775	675	20 1/4	33.3
2RR	12 1/4	STC	F-3	1981	1206	16 3/4	72
3RR	12 1/4	STC	F-3	2095	174	3 1/2	49.7
4	8 3/4	STC	F-2	2768	673	12 1/2	53.8
5	8 3/4	STC	F-2	5351	2583	57	45.3
6	8 3/4	STC	F-3	5790	439	16.5	26.6
7	8 3/4	Christian-son	C-23	5801	11	4	2.75
7RR	8 3/4	Christian-son	C-23	5818	17	11 1/4	1.51
8	8 3/4	VAREL	V537	5966	148	10	14.8
9	8 3/4	VAREL	V537	6339	373	27 1/2	13.6

DEVIATION SURVEYS

DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION	DEPTH	DEVIATION
282'	$1/4^{\circ}$								
735'	$1/4^{\circ}$								
1160'	1°								
1440'	$3/4^{\circ}$								
747'	$3/4^{\circ}$								
1961'	1°								
2095'	1°								
2556'	$1\ 1/4^{\circ}$								
3104'	$3/4^{\circ}$								
3630'	$3/4^{\circ}$								
4122'	1°								
4620'	$3/4^{\circ}$								
5129'	$3/4^{\circ}$								
5351'	$1\ 1/2^{\circ}$								
5790'	$3/4^{\circ}$								
5966'	1°								
6339'	1°								

MUD RECORD

DATE	DEPTH	WEIGHT	MUD GRAD.	FUNNEL VIS	PLASTIC VIS	YIELD POINT	GEL STREN.	pH	FILT. API	CAKE	ALK. FILT.	CHLOR PPM	CALC. PPM	SAND%	SOLID%	OIL%	WATER %			
2Dec	582	8.5	.442	28	-	-	-	-	-	-	-	180	54	-	-	-	-			Benex water
3Dec	1920	8.6	.447	28	-	-	-	-	-	-	-	-	-	-	-	-	-			
4Dec	WOC																			
5Dec	2675	8.5	.442	28	-	-	-	-	-	-	-	-	-	-	-	-	-			
6Dec	3239	8.6	.447	28	-	-	-	-	-	-	-	-	-	-	-	-	-			
7Dec	3837	8.8	.458	28	8.9	-	-	-	-	-	-	200	60	-	-	-	-			LSND
8Dec	4846	8.7	.452	27	-	-	-	-	-	-	0/.15	220	40	-	-	-	-			Benex water
9Dec	5594	8.6	.447	39	13	9	1/4	10.5	8.0	2/32	15/.2	700	-	-	2.2	-	97.8			LSND
10Dec	5790	8.6	.447	43	13	8	3/4	10.5	7.2	2/32	.3/.7	600	TR	-	2.5	-	97.5			LSND
11Dec	5790	8.6	.450	34	10	3	1/4	10.5	8.4	2/32	.35/.65	700	TR	-	2.8	-	97.2			LSND
12Dec	5801	8.7	.452	36	11	5	2/5	11.21	8.2	2/32	.3/.6	640	TR	1/4	3	-	97.0			LSND
13Dec	5818	8.7	.452	39	11	4	2/4	11.48	6.4	2/32	.3/.7	680	TR	1/4	3	-	97.0			LSND
14Dec	5966	8.6	.447	37	9	4	2/4	12.01	6.0	2/32	.4/.8	660	TR	1/4	2.4	-	97.6			LSND
15Dec	5966	8.7	.452	40	14	8	2/7	11.75	7.2	2/32	.3/.7	680	TR	TR	3	-	97		100	LSND
16Dec	6059	8.6	.447	40	17	11	3/8	10.0	8.0	2/32	.3/.7	700	42	1/4	2.4	-	97.6			LSND
17Dec	6339	9.0		49	15	9	3/8	12.0	9.8	2/32	.6/1.4	38,600	54	TR	2.7	-	97.3			LSND
18Dec	6339	9.3		50	19	11	3/8	12.0	8.0	2/32	.7/1.5	38,000	48	TR	5.0	-	95.0			Gel-Chem weigh TD
19Dec	6339	9.3		52	19	15	6/16	10.0	6.8	2/32	.2/.6	37,000	54	TR	5.0	-	95.0			Gel-C...n
20Dec	6339	9.3		47	18	12	4/2	10.0	7.4	2/32	.2/.5	37,000	54	TR	5.0	-	95.0			"

SAMPLE DESCRIPTIONS

30-foot Samples

2060 - 2090	85	SS	orng vfg sbrnd-sbang wsrt calc cmt fri dk mnrl gr
	15	SH	brn-red brn plty brit calc abun cmt in spl
2090 - 2120	90	SH	brn-red brn plty brit sbwxy call ip slty ip
	10	SLTST	brn varg sl sdy some cmn in spl
2120 - 50	90	SH	aa
	10	SLTST	aa
2150 - 80	90	SH	redbrn-orng brn plty-splty brit some wxy sl calc gngy mot occ calc fl frac & incl
	10	SLTST	brn varg fri
2180 - 2210	10		aa
2210 - 2240	40	SH	orngbrn-mrn smth-slty plty-blky brit sl-ncalc
	60	SLTST	orngbrn-redbrn arg fri calc ip
2240 - 70	60	SH	aa
	40	SLTST	aa cmt in spl
2270 - 2300	80	SLTST	orng-redbrn arg fri some cg-vfg sdy calc
	20	SH	aa
2300 - 2330	40	SH	redbrn-orngbrn plty-splty brit slty ip calc incl occ anhy incl
	60	SLTST	aa
2330 - 2360	50	SH	redbrn blky slty brit-fri calc incl
	50	SLTST	orngbrn-redbrn arg some sdy some p-p dk mnrl sl calc
2360 - 2390			aa
2390 - 2420	25	SH	aa some mrn-choc brn blky fis n calc
	15	SLTST	aa some v arg ark
	50	SS	rose-wh-redbrn fg-mg ang-sbrnd mw srt arg/calc cmt some lime cmt ark mica ip some dk mnrl
	10	LS	ay crpxl dns w/ slt/cly coating nod (cal?)
2420 - 2450	80	SS	dkgy-gy brn-lt orng brn vpg-ma ang-sbrnd mort arg ark ip mica ip scat dk mnrl occ cht frags
	15	SH	aa slty
	5	LS	aa
2450 - 2480	90	SH	mrn-choc brn-redbrn pred smth occ slty blky sbwxy thin plty gn clyst ptgs & mot
	10	SS	aa
2400 - 2510	10	SH	aa
	30	SS	aa pred gybrn-brn
	20	LS	gy-wh crpxl dns nod
	40	SLTST	brn v arg fri n calc
2510 - 2540	20	SH	brn-dk redbrn blky-plty sl slty ncalc
	40	SLTST	aa
	40	SS	brn-orng brn fg-vfg some slty sbrnd-sbang mwsrt arg cmt scat dk mnrl mica ip
	SCAT	LS	nod aa
2540 - 2570	70	SS	aa & wh-clr-lt orng vfg-mg ang-sbrnd msrt sil cmt & ovgth
	20	SLTST	brn v arg mica
	10	SH	aa
			gilsonite (coal?) in spl

2570 - 2600	40	SS	wh-clr aa
	30	SLTST	brn-orngbrn v arg mica sdy n calc
	20	SH	brn-orngbrn blky-splty some slty sl calc
	10	LS	wh-crm crpxl-mickl dns from nod (cgl)
2600 - 2630	30	SS	wh-clr aa
	20	SLTST	aa
	30	SH	aa calc incl
	20	LS	aa
2360 - 2660	55	SH	brn-orngbrn-orng plty slslty n calc
	10	SLTST	aa
	30	SS	orng fg sbrnd-sbang wsrt fri & wh-clr fg-mg sbrnd-sbang wsrt sil cmt & ovgth fri occ glauc incl
	5	LS	aa cmt in spl
2660 - 2690	40	SS	aa pred orng aa
	30	SLTST	orngbrn-brn varg some sdy fri sl calc
	30	SH	aa some mrn
2690 - 2720			aa
2720 - 2750			aa p spl abun cmt
2750 - 2780	90	SH	redbrn-brn-orng plty slty & mica ip sl calc
	10	SLTST	orng v arg fri ncalc
2780 - 2810	40	SH	aa incr orng anhy incl
	20	SLTST	aa
	40	SS	orngbrn fg-cg occ vca ang-sbrnd m-psrt arg cmt ark fri vcg gr lse sl-n calc
2810 - 2840	30	SH	aa calc ptgs
	40	SLTST	aa
	30	SS	aa
2840 - 2870	30	SH	orngbrn-brn blky mica slty ip n calc anhy strg
	50	SLTST	orngbrn varg sdy mica
	20	SS	aa
2870 - 2900			aa
2900 - 2930	40	SH	orngbrn-brn-mrn splty-blky slty & mica ip calc ip
	30	SLTST	aa
	30	SS	orng pred vcg-cg sbrnd-sbang lse gr prob arg dmt due to clay coating on gr
2930 - 2960	20	SH	aa
	40	SLTST	redbrn-orngbrn varg mica ark sl calc
	40	SS	aa & orng fg sbrnd arg cmt mica ark
2960 - 2990			aa
2990 - 3020			aa
3020 - 3050	40	SH	brn-orngbrn plty-blky some vmica
	40	SLTST	aa
	20	SS	aa
2050 - 3080	30	SH	aa
	70	SLTST	brn-redbrn-orngbrn varg mica sdy some wthrd biotite
3080 - 3110	30	SH	aa
	30	SLTST	aa
	40	SS	orng-orngbrn fg-mg sbrnd-ang mwsrt arg cmt mica ip ark occ wh vfg-fg sbrnd-sbang wsrt sil cmt glauc incl scat dk mnrl p ø

3110 - 3140	30	SH	brn-redbrn-mrn blky-plty sl slty mica ip occ gngy-purp clyst ptgs
	40	SLTST	brn arg fri sdy mica sl calc scat anhy ptgs sl calc
	30	SS	aa scat ls ptgs
3140 - 3170	40	SH	aa
	50	SLTST	aa abun weathered mica
	10	SS	aa some ltgn-wh vfg sbrnd wsrt sl calc vfri occ dk mnrl p ø scat ls & calc ptgs
3170 - 3200	10	anhy	wh chk
	20	SH	brn-orngbrn-redbrn splty-blky smth-sl slty occ mica
	40	SLTST	aa
	30	SS	orng-orngbrn fg-slty ang-sbrnd mwsrt arg cmt ark mica fri sl calc & wh-clr vfg-fg sbrnd wsrt calc cmt occ mica & glauc incl p ø
3200 - 3230	15	SH	aa
	40	SLTST	brn-rebrn arg v mica ark sdy v fri
	40	SS	aa
	5	anhy	aa some crm-orng sl calc
3230 - 3260	30	SH	brn-redbrn plty-blky sl slty n calc some gygn clyst sbwxy
	45	SLTST	aa
	25	SS	aa
3260 - 3290	30	SH	aa abun gn clyst sbwxy
	60	SLTST	orngbrn occ mrn arg v mica sdy n calc
	10	SS	orngbrn-tan occ wh-tn vfg-fg occ cg-vcg lse gr pred sbrnd-sbang m-psrt arg cmt n calc occ mica
3320 - 3250			aa
3350 - 3380	30	SH	aa
	65	SLTST	aa
	5	anhy	ptgy wh chk occ calc
3380 - 3410	40	SH	aa
	50	SLTST	orngbrn arg-varg v mica sdy n calc
	10	anhy	aa
	TR	SS	aa
3410 - 3440	20	SH	brn-redbrn-mrn blky-splty slty ip n calc gygn clyst sbwxy
	50	SLTST	aa
	30	SS	orngbrn-orng vfg-slty sbrnd-sbang wsrt arg cmt
	TR	anhy	aa
3440 - 3470	20	SH	aa some gygn mot slty ip
	65	SLTST	aa
	15	SS	aa
3470 - 3500	20	SH	brn-mrn-orngbrn some gygn mot smth-sl slty plty-blky some gygn-gn clyst
	65	SLTST	orng-orngbrn v arg sdy ip mica ip n calc
	15	SS	aa some wh fg-vfg arg/sil cmt
3500 - 3530	40	SH	aa
	50	SLTST	aa
	10	SS	aa

3530 - 3560			aa
3560 - 3590	30	SH	aa
	70	SLTST	orngbrn-orng-brn arg vmica sdy n calc some gngy sdy str scat cht frag gy
3590 - 3620			aa
3620 - 3650			aa
3650 - 3680	80	SH	brn-orngbrn-mrn blky-plty smth-sl slty sl calc some mica some gn wxy clyst
	20	SLTST	orngbrn shy sdy ip mica calc
	TR	LS	gy-wh crpxl dns (nod?)
3680 - 3710	70	SH	aa calc incl
	30	SLTST	aa
3710 - 3740	40	SH	aa some gn mot
	60	SLTST	orngbrn-orng arg aren ip calc TR qtz & cht frags
3740 - 3770	70	SH	dkbrn-orngbrn plty-splty smth-sl slty calc & calc incl gn clyst prgs
	30	SLTST	aa
3770 - 3800	40	SH	aa
	60	SLTST	aa TR qtz & cht frags
3800 - 3830	50	SH	aa incr mica
	50	SLTST	
3830 - 3860	20	SH	aa anhy incl & ptg
	30	SLTST	aa
	50	SS	brn-orngbrn mg-fg ang-sbrnd pred uncons prob cly mtx some scat wh vfg-fg ang wsrt sil cmt glauc incl tight
3860 - 3890	50	SH	orng-redbrn-brn plty-blky smth occ slty calc
	20	SLTST	aa
	30	SS	aa some clr
3890 - 3920	70	SH	aa
	30	SLTST	aa
	TR	LS	gy crpxl dns frm
	TR	SS	aa
3920 - 3950	60	SH	aa some dkbrn-mrn
	40	SLTST	orngbrn arg mica calc
3950 - 3980	70	SH	aa
	30	SLTST	aa
3980 - 4000	80	SH	orng-orngbrn pred plty smth calc occ calc ptgs
	20	SLTST	aa

10-foot Samples

4000 - 1010	90	SH	orng-brn plty-blky sl slty calc some mica gn mot & str calc ptgs
	10	SLTST	orng brn arg sdy ip calc
4010 - 4020	90	SH	aa
	10	SLTST	aa
4020- 4030	80	SH	aa
	20	SLTST	aa
	STR	SS	wh vfg occ fg-mg mwsrt sil cmt sl calc occ glauc incl p ø

4030 - 4040	80	SH	AA some redbrn-plty
	20	SLTST	orngbrn-redbrn some varg occ sdy mica ip cal ip
4040 - 4050	60	SH	orngbrn-brn-mrn plty occ blky sl calc some cal incl
	10	SLTST	aa
	30	SS	ltbrn-clr fg-mg wsrt pred lse prob cly mty
4050 - 4060	30	SH	aa
	20	SLTST	aa
	50	SS	aa
4060 - 4070			aa
4070 - 4080	70	SH	orngbrn occ brn plty-blky some sl slty mica occ calc & calc incl
	30	SLTST	orng brn varg mica calc ip
4080 - 4090	60	SH	aa
	40	SLTST	aa
4090 - 4100	70	SH	aa
	30	SLTST	aa
4100 - 4110	40	SH	dkbrn-orngbrn plty-splty smth-sl slty occ mica calc & calc incl some gn clyst ptgs
	60	SLTST	aa
4110 -4120	50	SH	aa
	50	SLTST	aa
4120 - 4130	60	SH	aa pred brn
	40	SLTST	orngbrn-brn arg fri mica calc ip
4130 - 4140	50	SH	aa incr calc incl
	50	SLTST	aa
4140 - 4150	40	SH	brn-orngbrn-redbrn plty smth calc ip occ gn clyst ptgs w/pyr incl
	60	SLTST	aa
4150 - 5160	40	SH	aa
	60	SLTST	orngbrn-brn arg-varg fri some sdy calc ip
	TR	LS	ptgs gy crpxl dns
4160 - 4170	70	SH	aa calc incl & anhy incl
	30	SLTST	aa
4170 - 4180	70	SH	brn-orngbrn-mrn plty-blky mica ip n calc scat gn clyst ptgs
	30	SLTST	aa some v sdy
4180 - 4190			aa
4190 - 4200	90	SH	orngbrn-brn plty-blky smth calc ip occ calc incl mica ip some gn sh ptgs sbwxy
	10	SLTST	orngbrn varg mica sl calc
	TR	LS	dkgy crpxl dns hd (nod?)
4200 - 4210	80	SH	aa incr dkbrn gn mot ip
	20	SLTST	aa
4210 - 4220	60	SH	aa some slty
	40	SLTST	aa
4220 - 4230	70	SH	dk brn-brn-orngbrn plty-blky smth calc some gn sbwxy
	30	SLTST	orngbrn arg fri mica calc occ anhy incl
4230 - 4240	80	SH	aa
	20	SLTST	aa
4240 - 4250	90	SH	aa occ calc ptgs
	10	SLTST	aa

4250 - 5260	70	SH	AA some gn wyx w/pyr incl
	30	SLTST	aa
4260 - 4270	90	SH	brn-mrn-orngbrn occ gn mot smth some sl slty occ mica calc ip some gn wxy calc ptgs
	10	SLTST	aa
	TR	LS	wh chk sft & gy-pk crpxl dns hd
4270 - 4280	80	SH	aa
	20	SLTST	aa
	TR	LS	aa
4280 4290	90	SH	aa incr gn ptgs
	10	SLTST	orngbrn-brn arg fri sl sdy calc
	TR	LS	aa
4290 - 4300	100	SH	aa
	TR	SLTST	aa
	TR	SH	aa
4300 - 4310	30	SH	aa
	70	SLTST	orngbrn-brn arg ip fri mica ip calc vsdy scat cht frags gy
	TR	LS	aa
4310 - 4320	50	SH	orngbrn-brn plty-blky smth-sl slty calc scat gn sh ptgs sbwxy
	50	SLTST	aa scat gy cht frags
4320 - 4330	90	SH	aa some slty
	10	SLTST	aa
4330 - 4340	90	SH	aa
	10	SLTST	aa
4340 - 4350			aa
4350 - 4360	90	SH	aa
	10	SLTST	aa
		LS	ptgs gybrn crpxl dns hd
4360 - 4370	90	SH	orngbrn-brn occ mrn plty-blky occ slty & mica calc scat gn sh ptgs sbwxy smth
	10	SLTST	orngbrn arg fri mica sl calc
4370 - 4380	90	SH	aa anhy incl
	10	SLTST	aa
4380 - 4390	90	SH	aa incr brn occ anhy incl
	10	SLTST	aa
4400 - 4410	75	SH	aa
	20	SLTST	aa
	5	SS	wh-clr vfg ang-sbrnd wsrt wcmt calc sil cmt glauc & dk mnrl incl tight
4410 - 4420	85	SH	brn-redbrn-orngbrn-mrn plty occ blky smth calc scat gn sh ptgs
	10	SLTST	orngbrn-brn arg-varg fri mica calc
	5	SS	aa
4420 - 4430	80	SH	aa occ anhy incl
	20	SLTST	aa
4430 - 4440	80	SH	aa
	20	SLTST	aa
	TR	LS	gy crpxl dns frm
4440 - 4450	20	SH	aa
	20	SLTST	aa
	60	SS	clr-wh-rose fg-mg ang-sbang pred uncons some sil cmt n calc prob cly mtx occ glauc incl

4450 - 4460	80	SH	brn-redbrn-mrn-some gn mot blky-plty sl slty calc some calc/ls strg
	10	SLTST	aa
	10	SS	aa
4460 - 4470	80	SH	aa
	20	SLTST	brn varg mica calc
	TR	SS	aa
4470 - 4480			aa
4480 - 4490	70	LS	wh chk frm micritic some micsuc txt & ltgy-wh-gybrn crpxl dns biosparite w/brn stn ool indst fos & algal(?) remains abun mic suc-suc txt some rexl/infill of intrgran ø nsofc
	20	SH	aa
	10	SLTST	aa
4490 - 4500	80	LS	aa
	10	SH	aa
	10	SLTST	aa
4500 - 4510	30	SH	brn-gybrn-gy blky fis finely mica calc & sh aa
	5	SS	gy-gygn vfg sbang wsrt sl calc sil cmt scat glauc incl tight
	65	LS	aa some lchd ool
4510 - 4520	40	SH	aa
	30	SS	wh-clr fg-mg ang-sbang mwsrt pale gn-wh arg dmt fri tight
	30	LS	wh-ltgy crpxl plty pel sparite abun ool abun mic suc txt (rexl/infill)
4520 - 4530	90	SH	aa
	TR	SS	
	10	LS	aa
4530 - 4540	40	SH	aa abun mica
	60	SS	wh-ltgy brn vfg ang-sbang wsrt fri calc/arg cmt vmica p ø
	TR	LS	aa
4540 - 4550	30	SH	aa
	70	SS	aa
4550 - 4560	70	SH	brn-gybrn plty-blky sl slty vmica fis
	70	SS	ltgy-gybrn-wh vfg-fg ang-sbang wsrt fri calc sil cmt sl sil ovgth abun glauc incl dk mnrl
	10	LS	aa spls contaminated w/refined hc
4560 - 4570	30	SH	aa
	70	SS	aa incr gybrn abun mica arg contaminated aa
4570 - 4580	20	SH	aa
	80	SS	aa contaminated aa
4580 - 4590	20	SH	aa & blk vit carb carb incl sl cal
	10	SS	aa
	70	LS	gybrn-gy-wh crpxl dns hd lith (lithographic) ip some pel txt heavily contaminated w/hc
4590 - 4600	TR	SH	aa
	100	LS	aa incr pil txt occ ool & indst fos frags
4600 - 4610	90	LS	dkgybrn crpxl dns hd lith & ls gybrn-wh crpxl-micxl frm pel/ool some mic suc txt algal remains?
	10	SH	gybrn blky fis vmica calc

4610 - 4620	100	LS	aa
4620 - 4630	20	SH	aa
	70	SS	wh-clr-occ rose-pk fg-mg occ cg ang-sbrnd mrst ltgn arg cmt pred uncons prob tight
	10	LS	aa
4630 - 4640	60	SH	brn-redbrn-occ orngbrn blky-plty some vmica sl calc
	20	SS	aa
	20	LS	wh chk micritic & ls aa
4640 - 4650	20	SH	aa
	70	SS	wh-ltgy-gy vfg sbang-sbrnd w srt fri sil cmt sl arg occ glauc incl & mica flks tight
	10	LS	wh chk micritic sparry ip
4650 - 4660	30	SH	aa
	60	SS	aa
	10	LS	aa
4660 - 4670	10	SH	gy-dkgybrn blky-splty slty calc
	TR	SS	aa
	90	LS	wh chk aa & gybrn crpxl dns frm occ ool & indst fos
4670 - 4680	30	SH	aa
	60	SS	aa incr gy-dkgy
	10	LS	aa
4680 - 4690	20	SH	aa
	60	SS	gy-dkgy-wh vfg occ fg ang-sbrnd wsrt calc fri sil cmt mica ip tight
	20	SLTST	gy sl arg v fri aren mica calc
4690 - 4700	10	SH	aa
	40	SLTST	aa
	50	SS	aa
4700 - 4710	10	SH	gy blky-splty slty mica calc
	70	SLTST	aa
	20	SS	aa
4710 - 4720	20	SH	aa some red orng-orngbrn blky sl slty-smth n calc
	60	SLTST	aa
	10	SS	aa
	10	LS	gybrn-gy crpxl-micxl some sparry pel ip
4720 - 4730	40	SH	aa
	20	SLTST	aa
	40	SS	wh-gy-gybrn vfg-fg some slty ang-sbrnd mwsrt fri calc sil cmt arg ip occ mica flks & glauc incl occ fld gr & dk mnrl right
	TR	LS	aa some wh chk
4730 - 4740	60	SH	redbrn-brn-mrn blky-splty smth-sl slty sl calc & some gy-gybrn blky slty calc
	40	SS	aa some pale gn arg cmt
	TR	SLTST&LS	aa
4740 - 4750	70	SH	aa
	30	SS	aa
4750 - 4760	20	SH	aa
	10	SLTST	gy frm-fri aren calc
	70	LS	gy-gybrn micxl-crpxl dns frm pel/ool ip indst fos frags

4760 - 4770	40	SH	gy-dkgy plty-blky sl slty mica v calc
	60	LS	aa
4770 - 4780	20	SH	aa
	80	LS	aa & wh-ltgy pelmicrite/calcarenite
4780 - 4790	40	SH	aa & redbrn-brn blky-splty smth sl-n calc
	20	SLTST	brn aren sl arg calc fri
	40	LS	dkgybrn-gy crpxl dns frm & LS aa
4790 - 4800	40	SH	aa
	20	SLTST	aa
	20	SS	wh-crm-gy vfg-fg ang-sbrnd wsrt fri calc arg/sil cmt mica flk & glauc incl tight p ø
	10	LS	aa
4800 - 4810	70	SH	brn-gybrn-occ orngbrn blky-plty smth-slty mica ip
	20	SLTST	brn arg ip mica ip aren calc
	10	SS	aa incr ø f-g
4810 - 4820	30	SH	aa
	10	SLTST	aa
	60	SS	wh-ltbrn some gr brn stn vfg-mg occ cg-vcg sbrnd-ang m-psrt some fros gr uncons arg cmt n calc glauc incl p ø
4820 - 4830	30	SH	aa
	10	SLTST	aa
	60	SS	aa
4830 - 4840	60	SH	aa
	20	SLTST	aa
	20	SS	aa
	TR	anhy	wh-orng chk frm
4840 - 4850	70	SH	aa some gn sh mot
	10	SLTST	aa
	10	SS	aa
	10	ANHY	aa
4850 - 4860	90	LS	wh-crm-tan-crpxl dns bio sparite pel algal remains
	10	SH,SLTST	aa
4860 - 4870	10	SH	dkgy-gy plty-blky slty ip n calc & sh brn-redbrn blky slty n calc
	30	SLTST	brn-gybrn arg aren v fri mica calc
	60	LS	aa
4870 - 4880	30	SH	aa
	60	SLTST	aa
	10	LS	aa
4880 - 4890	20	SH	aa
	80	SLTST	aa
	TR	LS	aa
4890 - 4900	10	SH	aa
	90	SLTST	gybrn-brn sl arg aren v fri mica sl cal
4900 - 4910	40	SH	brn-dkbrn-orngbrn-some gn mote & ptgs plty-blky smth-slty n-sl calc
	60	SLTST	aa some sdy
4910 - 4920	60	SH	aa incr gn ptgs
	40	SLTST	aa

4920 - 4930	60	SH	aa
	40	SLTST	aa some sdy str
	10	LS	wh-crm chk micritic frm & ltbrn-wh crpxl dns frm
4930 - 4940			aa
4940 - 4950	30	SH	brn-gy-orngbrn plty-blky smth-slty sl- n calc some gn sl slty ptgs
	70	SLTST	brn-gybrn arg aren v mica fri calc
4950 - 4960	20	SH	aa
	30	SLTST	aa
	50	LS	gybrn-gy crpxl occ micxl dns frm n fos some wh-crm micritic sft
4960 - 4970	25	SH	gy-dkgy blky slty frm-hd sl calc & sh aa
	10	SLTST	aa
	15	SS	wh-clr mg-fg ang-sbrnd mwsrt fri arg cmt calc ip dk mnrl incl p ø
	50	LS	aa
4970 - 4980			aa
4980 - 4990	20	SH	aa
	20	SLTST	aa
	50	SS	aa abun mica some blk asph stn nsofc
	10	LS	aa
4990 - 5000	30	SH	brn-orngbrn blky sl slty-slty frm sl-n calc
	50	SLTST	gy-dkgy sl arg aren sdy ip sl calc
	20	SS	aa slty ip
5000 - 5010	60	SH	redbrn-orngbrn-brn plty-blky smth-sl slty calc ip & gy-dkgy blky slty calc
	30	SLTST	brn-gy aren arg ip fri calc
	10	LS	gybrn-tan crpxl dns frm pel/ool sparite ip
5010 - 5020	25	SH	aa
	35	SLTST	aa
	10	SS	gy-wh vfg sbang-ang wsrt sil/arg cmt some mica & dk mnrl incl calc tight
	30	LS	wh-ltgybrn micxl biosparite ool indst fos some gybrn aa
5020 - 5030	60	SH	brn-redbrn-orngnrn blky sl slty calc
	30	SLTST	brn-gybrn arg ip aren v fri mica calc
	TR	SS	aa
	10	LS	aa
5030 - 5040	50	SH	aa
	30	SLTST	aa
	15	SS	aa v mica
	5	LS	wh-pk chk micritic arg ip
5040 - 5050	40	SH	aa nod anhy incl
	60	SLTST	aa
	TR	SS&LS	aa
5050 - 5060	50	SH	aa nod anhy incl calc fl frac
	50	SLTST	aa
5060 - 5070	20	SH	brn-redbrn-gy brn blky slty mica ip calc ip
	65	SLTST	gybrn arg ip aren mica vfri calc
	15	SS	ltbrn-off wh vfg-slty ang-sbrnd wsrt vfri sil cmt calc ip mica dk mnrl incl p ø
5070 - 5080	15	SH	aa
	55	SLTST	aa
	30	SS	aa

5080 - 5090	30	SH	aa
	60	SLTST	aa
	10	LS	dkbrn-gy micxl-crpxl dns frm sl arg
5090 - 5100	40	SH	aa & gy-dkgy blky-plty slty frm n calc
	15	SLTST	aa
	45	LS	aa some wh ch micrite
5100 - 5110	100	SH	dkgy aa
	TR	LS	aa
5110 - 5120	100	SH	dkgy-gy plty-blky slty lmy finely mica
	TR	LS	gybrn crpxl dns hd n fos
5120 - 5130			aa
5130 - 5140	100	SH	aa
5140 - 5150	40	SH	aa & redbrn-orngbrn blky-plty frm sl slty anhy incl some gn mot
	45	SLTST	gy-dkgy some orngbrn aren ip arg fri mica sl calc
	15	SS	wh-gy-dkgy vfg-slty occ fg ang-sbrnd mwsrt sil cmt some calc mica & dk mnrl incl
5150 - 5160	95	SH	gy-dkgy splty-plty frm slty finely mica calc some redbrn-orngbrn aa
	5	LS	dkgy-gy crpxl dns hd n fos
5160 - 5170	90	SH	aa
	10	LS	aa
5170 - 5180	90	SH	aa
	10	LS	aa
5180 - 5190	90	SH	aa
	10	LS	aa
5190 - 5200	75	SH	aa some brn-orng brn blky slty sl-n calc
	75	LS	wh chk frm some blk asph stn nsofc some micxl-crpxl dns fm n fos
5200 - 5210	35	SH	aa
	50	SLTST	ltgy-ltbrn sl arg aren mica ip fri calc some sdy str
	15	LS	aa
5210 5220	15	SH	aa
	65	SLTST	aa v mica
	15	SS	ltgy-ltgygn vfg-slty ang-sbrnd wsrt v mica dk mnrl incl
	5	LS	aa
5220 - 5230	40	SH	brn-gy-dkgy plty-blky smth-slty frm calc ip some redbrn-orngbrn blky slty ip n calc
	40	SLTST	aa
	10	SS	aa
	10	LS	aa
5230 - 5240	30	SH	aa
	55	SLTST	aa
	15	LS	aa
5240 - 5250	60	SH	aa
	25	SLTST	aa some v mica
	15	LS	gybrn crpxl dns hd some intra clastic(?) n fos
5250 - 5260	10	SH	aa
	90	LS	aa some wh micritic calcarenite

5260 - 5270	100	LS	aa
	TR	SH	aa
5270 - 5280	90	LS	gybrn-dkgybrn crpxl dns frm lith some wh micrite & calcarenite
	10	SH	aa
5280 - 5290	85	LS	aa
	15	SH	dkgy plty smth-slty frm sl calc & redbrn blky smth-slty n calc occ anhy incl
5290 - 5300	65	LS	aa
	35	SH	aa
5300 - 5310	80	SH	aa
	20	LS	aa some bio micrite pl remains
5310 - 5320	50	SH	aa some carb ptgs & incl
	30	SLTST	wh-ltgybrn sl arg aren fri mica calc
	20	LS	aa
5320 - 5330	30	SH	aa incr redbrn
	50	SLTST	aa
	20	LS	aa
5330 - 5340	30	SH	aa
	60	SLTST	aa some sdy str
	10	LS	aa
5340 - 5350	30	SH	gy-dkgy blky slty mica calc some carb & brn-redbrn smth-slty sl calc
	40	SLTST	aa sdy ip
	30	LS	aa
5350 - 5360	85	LS	ltgy-dkgy crpxl occ micxl dns lith ip & ltgy-wh chk micritic n fos
	15	SH&SLTST	aa
5360 - 5370	20	SH	dkgy-gy-brn blky fis ip slty calc & redbrn-brn blky-slty sl-n calc
	80	LS	gybrn-gy crpxl dns from ip pred bio sparite pel ool crin some (intra clastic?) bioclastic? w/sparite in voids some blk asph stn in voids nsofc p ø some wh chk-sparry
5370 - 5380	20	SH	aa
	80	LS	aa tr foram
5380 - 5390	25	SH	aa some gn mot in redbrn sh
	75	LS	aa incr wh chk-sparry some mic suc txt sft
5390 - 5400	15	SH	redbrn-brn blky slty lmx ip frm
	85	LS	gy-dkgybrn micxl-crpxl dns frm-hd some pel sl arg n fos some dd blk stn fl frac wh-ltgy micxl-chk calcarenite-calcsiltite
5400 - 5410	25	SH	aa
	75	LS	aa
5410 - 5420	20	SH	orngbrn-redbrn-brn blky-splty slty ip mica ip sl-n calc some gn sity sh
	80	LS	gybrn-dkgy crpxl dns hd lith occ pel indst fos some micxl-sparry w/blk asph stn nsofc
5420 - 5430	30	SH	aa
	70	LS	aa
5430 - 5440	100	LS	gybrn crpxl aa some (<10%) wh-crm chk micritic sft
5440 - 5450	100	LS	gybrn crpxl dns hd lith w/brn cht frags n fos some wh micrite sft

5450 - 5460	80	LS	aa cht frags ltgybrn
	20	SH	dkgy blky-plty sb fis slty frm sl calc
5460 - 5470	100	SH	aa
	TR	LS	aa
5470 - 5480	90	SH	aa some orngbrn blky smth-slty calc ip
	10	LS	gybrn-ltgy crpxl dns frm some wh micxl-dhk n fos
5480 - 5490	20	SH	aa
	70	LS	aa & wh-ltgy chk calcsiltite-calcarenite sft ltbrn-trans cht frags
	10	SLTST	ltgy-gybrn sl arg aren fri calc
5490 - 5500	100	LS	aa abun ltbrn-brn cht frags some blk asph stn in calcarenite nsofc
5500 - 5510	100	LS	dkgybrn-gybrn micxl-crpxl dns ip some stylolites pyr incl n fos brn-ltgy cht frags & wh-ltgy chk aa
5510 - 5520	100	LS	pred dkgybrn-gybrn aa
5520 - 5530	80	SLTST	mgy sl arg v fine slt size gr w ind calc fri
	20	LS	aa some slty
5530 - 5540	90	SLTST	aa
	10	LS	aa
5540 - 5550	40	SLTST	aa
	60	LS	gybrn micxl occ crpxl frm some sparry mtx tr spg spic pel 1/2 mm sparry ool & wh micritic-sparry sft calcarenite ip tr blk asph stn nsofc brn cht frags
5550 - 5560	20	SLTST	aa
	80	LS	aa
5560 - 5570	100	LS	lt-mgybrn micxl vuc ip tr p-p blk asph? stn in intrgran ø p ø nsofc indst fos frags lt gy cht frags & wh-ltgy chk micritic calcarenite
5570 - 5580	10	LS	aa
	90	SLTST	ltgy-gybrn arg ip aren w ind calc
5580 - 5590	100	SLTST	aa
5590 - 5600	80	SS	wh-ltgy vfg-slty ang-sbrnd wsrt sil cmt calc ip mica occ glauc incl p ø
	20	SLTST	aa
5600 - 5610	90	SS	aa incr mica dk mnrl (carb?) incl
	10	SLTST	aa
5610 - 5620	85	SS	aa bcmg slty
	15	SLTST	gy-dkgy aren sdy w ind calc
5620 - 5630	65	SLTST	aa
	20	SH	dkgy blky slty sb fis calc
	15	SS	aa
5630 - 5640	80	SLTST	aa
	20	SH	aa some dkbrn slty muddy nod
5640 - 5650	30	LS	ltgy-wh micxl occ crpxl suc ip dns dol ip tr algal remains tri crin columnals
	60	DOL	gybrn crpxl dns pred primary dol v little rexl occ rp vvgs
	10	SLTST	aa
5650 - 5660	30	LS	aa some slty crin columnals
	40	DOL	aa
	10	SH	dkgy blky frm-hd dol ip calc slty ip
	20	SLTST	aa

5660 - 5670	25	SH	aa
	50	DOL	dkgy micxl-crpxl slty hd
	25	LS	aa
5670 - 5680	100	SH	dkgy blky brit slty dol frm-hd some mud pel
	TR	DOL	aa
5680 - 5690	100	SH	aa
5690 - 5700	100	SH	aa
5700 - 5730			spls lost due to loss of circulation
5730 - 5740	70	LS	gy-gybrn micxl some calcarenite frm some dol some p-p vugs & gy-off wh micritic clean sft tr indst fos frags abun tan-brn-smky cht frags
	30	SH	aa
5740 - 5750	70	LS	aa
	30	SH	dkgy-blk blky rthy dol carb ip
5750 - 5760	20	SH	aa
	80	LS	aa pspl
5760 - 5770	25	SH	aa
	75	LS	aa indst fos frags
	TR	ANHY	wh-crm-pk chk sft vp spl abun lcm in spl
5770 - 5780	30	SH	blk-dkgy blky sl slty calc
	55	LS	dkgy-gybrn crpxl-micxl dns hd sl dol some ltgy micxl suc txt indst fos
	10	ss	wh vfg sbrnd wsrt fri calc cmt p ø
	5	ANHY	wh xl
5780 - 5790	80	LS	gybrn-gy micxl some suc txt bio sparite pel crinoid columnals & indst fos frags spotty intrgran ø partial anhy infill
	20	LS	wh-crm micrite sft occ tan-smky cht frags
	TR	ANHY	wh xl vp spl abun lcm in spl

CORE #1 DESCRIPTION

Cored 5790 - 5801
5790 - 5791 1 foot recovery

MACROSCOPIC

small vertical near vertical frac dkgy lith ls intb w/ltbrn coarsely sln ls some gas bubbling from frac

MICROSCOPIC

ls dkgy crpxl carbonate mudst lith hd crin columnals & fragments & spg spic intb w/ltgybrn bio micrite abun forams (fusilinid) & indst fos frags prob bioclastic small vertical & near vert frac occ horiz frac some blk asph stn in frac nsofc

CORE #2 DESCRIPTION

5801 - 5818
Recovered 5801 - 5816

MACROSCOPIC

Entire core was dkgy smooth with vertical fractures splitting core almost exactly in half

MICROSCOPIC

dol ltgybrn-gybrn-dkgy silt size dol xl pred anhedral occ euhedral rhombs few clastic gr arg no vis intrxln ø prob some primary ø scat rp vugs

5801 - 5805	DOL	aa
5805 - 5806		unidentified fos cast occ h-line frac healed
5806 - 5807	DOL	aa pelecypod(?) frag
5807 - 5808	DOL	aa scat dkbrn pel
5808 - 5809		aa
5809 - 5810		aa pelecypod frag
5810 - 5814		aa
5814 - 5815		aa plcy frag
5815 - 5816		aa

5818 - 5820	NS		
5820 - 5830	100	SH	dkgy-blk blky slty lmy frm calc & pyr fl frac (acic needles aragonite?)
5830 - 5840	70	SH	aa
	10	LS	ltgybrn-tan-dkbrn crpxl dns carbonate mudst frm & ls wh-crm micrite sft
	20	ANHY	wh-crm sft
5840 - 5850	15	SH	aa
	20	LS	wh chk micritic arg ip some calcarenite-calcsiltite some mic suc txt
	50	LS	tan-dkgybrn micxl carbonate mudst arg ip some drsy-micsuc pore fl occ ool & indst fos scat brn stn nsofc
	10	SLTST	gy-off wh aren occ vfg sdy v fri dol cmt ip pred calc cmt occ glauc incl mica ip
	5	ANHY	aa
5850 - 5860	20	SH	aa
	35	LS	tan-dkgybrn aa
	25	LS	wh chk aa
	20	SLTST	aa arg p spl
5860 - 5870	80	LS	ltgy-ltgybrn crpxl-micxl calcirudite breccia w/wn micrite mtx pel scat sd gr indst fos frags some suc txt brn stn in intrgran ø nsofc
	20	SH&SLTST	aa
5870 - 5880	100	LS	aa some algal leaves mic suc txt ip some intr gran ø & p-p vugs 4-6% ø est some brn stn nsofc
5880 - 5890	60	LS	wh-crm micrite mtx
	40	LS	ltgy-ltgybrn micxl-crpxl a occ ool algal leaves & pellets causiltite ip in micrite mtx some suc txt 4-6% ø est incr brn stn in intragran ø no flor v faint yel crush cut
	TR	SH	aa
5890 - 5900	80	DOL	dkgybrn-gybrn arg slty slt size ns dns hd (dol turns brown after adding 10% hcl)
	20	LS	aa
5900 - 5910	100	DOL	aa gas bubbling from intrgran ø some calc fl frac & pyr incl nsofc
	TR	LS	aa
5910 - 5920	100	DOL	gybrn-dkgybrn arg slty slt size xls dns hd occ fos frags
	TR	LS	aa
5920 - 5930	100	DOL	aa some acid cut
5930 - 5940	90	DOL	aa
	10	SH	dkgy-blk blky brit slty carb flks lmy (dol?)
5940 - 5950	80	SH	aa
	20	DOL	aa
5950 - 5960	75	SH	dkgy splty-blky slty dol frm sl-n carb pyr ptgs & incl
	15	SLTST	brn arg v fri calc
	TR	SS	wh-off wh fg-vfg ang-sbang mwsrt fri mica sil cmt
	10	DOL	aa

TRANSCO EXPLORATION COMPANY
DRILL STEM TEST
REPORT SHEET

I. GENERAL DATA:

Date 20 DEC 1984 Lease and Well No. #1-3 IRON SPRINGS
Location SEC 3 TWP 33S R25E SAN JUAN CO, UTAH
DST No. 3 Formation DESERT CREEK
Test Interval 6204-6339 Test Tools 233 ft.
Drill Collars 6.25 OD 2.25 ID 571 Length
Drill Pipe 4.5 OD 3.83 ID 5535 ~~Wedge~~ Length
Water Cushion None ft. bbls

II. SURFACE FLOW DATA:

Tools Opened 7:25 AM Total Length of Test 235 mins
Initial Flow 15 mins - Description OPN N/V WEAK BLOW 1" IN BUCKET REMAINED WEAK THRU TEST NGTS

Initial Shut In 30 mins
Final Flow 60 mins - Description OPN W/ WEAK BLOW - DEAD IN 35 MIN - NGTS

Final Shut In 120 mins

III. PRESSURE RECORDER DATA:

Top Chart	3183'	depth	Bottom Chart	6336'	depth
Init Hyd	3061	psi		3166	psi
IFP	41 / 41	psi		1708 / 1573	psi
ISIP	1791	psi		1869	psi
FFP	41 / 68	psi		1600 / 1290	psi
FSIP	1656	psi		1737	psi
Final Hyd	3007	psi		3112	psi

BHT 154 ° F. @6335

IV. RECOVERY DATA:

Depth to fluid 6094 ft. Total Recovery 75 ft. bbls

Description of Recovery				Sample Chamber	
75 ft	bbls of	MUD		cfg @ 38 psi	
ft	bbls of		2240	cc of	MUD
ft	bbls of			cc of	
ft	bbls of			cc of	
ft	bbls of			cc of	
ft	bbls of			cc of	

V. MISCELLANEOUS DATA:

Mud		Resistivity	Chlorides	Nitrates	Chromates
Mud Filtrate	.506 @	53 ° F.	9,000 ppm	ppm	ppm
	@	° F.	23,000 ppm	ppm	ppm

TRANSCO EXPLORATION COMPANY
DRILL STEM TEST
REPORT SHEET

I. GENERAL DATA:

Date 15 DEC 1984 Lease and Well No. #1-3 IRON SPRINGS
Location sec 3 TWP 33S R2SE SAN JUAN CO, UTAH
DST No. 2 Formation LOWER ISMAY
Test Interval 5830 -5966 Test Tools 262' ft.
Drill Collars 6.25 OD 2.25 ID 536' Length
Drill Pipe 4.5 OD 3.827 ID 5168' ~~Weight~~ Length
Water Cushion NONE ft. bbls

II. SURFACE FLOW DATA:

Tools Opened 0855 AM Total Length of Test 225 mins
Initial Flow 15 mins - Description OPN W/WEAK BLOW - CLOSE W/WEAK BLO

Initial Shut In 30 mins
Final Flow 60 mins - Description OPN W/WEAK BLOW - 1 1/2 " IN BUCKET - WEAK BLOW THROUGH TEST - CLOSED WITH WEAK BLOW NATS

Final Shut In 120 mins

III. PRESSURE RECORDER DATA:

			Bottom Chart		
Top Chart	5812	depth		5968	depth
Init Hyd	2690	psi		2641	psi
IFP	53.7 / 107.3	psi		27 / 54	psi
ISIP	214.5	psi		162	psi
FFP	107.3 / 187.7	psi		81 / 135	psi
FSIP	321.8	psi		270	psi
Final Hyd	2690	psi		2641	psi

BHT 138 ° F. @ 5965'

IV. RECOVERY DATA:

Depth to fluid 5716' ft. Total Recovery 250 ft. 1.23 bbls

Description of Recovery					Sample Chamber			
250	ft	1.23	bbls of	CAS CUT MUD	24	cfg @	54	psi
	ft		bbls of		900	cc of	GCM	
	ft		bbls of			cc of		
	ft		bbls of			cc of		
	ft		bbls of			cc of		
	ft		bbls of			cc of		

V. MISCELLANEOUS DATA:

Mud			Resistivity		Chlorides	Nitrates	Chromates
Mud Filtrate	3.46	@	60	° F.	455 ppm	100 ppm	ppm
Top Sample	4.18	@	55	° F.	394 ppm	ppm	ppm

TRANSCO EXPLORATION COMPANY
DRILL STEM TEST
REPORT SHEET

I. GENERAL DATA:

Date 10 DEC 1984 Lease and Well No. # 1-3 IRON SPRINGS
Location SEC 3 TWP 33S R25E SAN JUAN CO, UTAH
DST No. 1 Formation SITTON (A) OF PARADOX FM
Test Interval 5680-5791 Test Tools 207 ft.
Drill Collars 6.25 OD 2.25 ID 602 Length
Drill Pipe 4.5 OD 3.83 ID 4971 Weight
Water Cushion NONE ft. bbls

II. SURFACE FLOW DATA:

Tools Opened 12.55 P.M. ~~AM~~ Total Length of Test 210 mins
Initial Flow 210 mins - Description OPN W/WEAK BLO IN 15 MIN: 1.502; IN 75 MIN: 207; 135 MIN: 207 IN 150 MIN: 3.5 PSI; IN 180 MIN; 5.25 PSI; IN 195 MIN: 6.25 PSI; IN 210 MIN: 9 PSI NGTS

Initial Shut In mins
Final Flow mins - Description NO ISI, FF, FSI PERIODS

Final Shut In mins

III. PRESSURE RECORDER DATA:

	Top Chart		Bottom Chart	
	5659	depth	5787	depth
Init Hyd	2574	psi	2652	psi
IFP	68 / 257	psi	81 / 255	psi
ISIP		psi		psi
FFP	/	psi	/	psi
FSIP		psi		psi
Final Hyd	2547	psi	2578	psi

BHT 135 ° F.@ 3786'

IV. RECOVERY DATA:

Depth to fluid ft. Total Recovery NONE ft. bbls

Description of Recovery			Sample Chamber	
ft	bbls of		.112 cfg @ 30	psi GAS
ft	bbls of		900 cc of	WATER
ft	bbls of		400 cc of	LCM & MUD
ft	bbls of		cc of	
ft	bbls of		cc of	
ft	bbls of		cc of	

V. MISCELLANEOUS DATA:

Mud		Resistivity	Chlorides	Nitrates	Chromates
Mud Filtrate	3.62 @	61 ° F.	450 ppm	ppm	ppm
Top Sample	@	° F.	ppm	ppm	ppm

5960 - 5970	30	SH	aa
	40	LS	wh-gybrn micxl-crpxl calcirudite breccia? some mix suc txt some rexl some pel ool dol ip some lse dol rhombs some brn stn nsofc 6-8%(?)ø
	15	LS	wh-crm micritic sft-frm
	15	SS	wh-gy vfg-slty wsrt fri dol cmt
5970 - 5980	60	LS	gybrn-wh crpxl-micxl dns ip suc 6% ø dol rexl pel crin columnal indst fos some dkgy carbonate mudst w/fos frags some breccia
	20	LS	wh chk micrite frm scat fos frags
	20	SH	aa
5980 - 5990	90	LS	gybrn-wh aa scat brn stn in suc ø nsofc scat dk gy chk
	10	LS	wh micrite aa
5990 - 6000	70	LS	gy-gy brn micxl carbonate mudst pel dol & dol rexl suc ø ~6% ø brn stn nsofc & ls wh chk micritic sft-frm
	30	DOL	gybrn-dkgy rthy arg slty hd (treated w/10% hcl dol turns brn)
6000 - 6010	40	DOL	aa
	60	LS	aa
6010 - 6020	90	DOL	aa
	10	LS	aa p spl (loc @ 6016')
6020 - 6030	100	DOL	dkgy rthy blky arg slty some lam hd (treated aa)
6030 - 6050	100	DOL	aa vp spl
6050 - 6090		DOL	aa incr slty arg shy ip
6090 - 6100	90	DOL	aa occ anhy incl
	10	sh	dkgy-blk blky fis carb flks sl dol scat anhy ptgs wh chk
6100 - 6110	20	SH	aa incr dol
	10	SLTST	off wh-gy-brn aren fri dol cmt some arg
	70	DOL	dkgy-gybrn rthy slty arg occ mud pel grdg to dol-lmy mudst pel ip
6110 - 6120	50	SH	aa
	10	SLTST	aa
	40	DOL	aa
6120 - 6130	90	SH	aa
	10	DOL	aa
6130 - 6180	20	ANHY	wh-crm chk-xln
	80	SA	all dissolved in mud abun sh aa
6180 - 6190	90	SH	dkgy-dkgybrn blky fis dol
	10	ANHY	wh shk & trnsl xln
6190 - 6200	65	SH	aa
	15	ANHY	aa
	20	DOL	gybrn crpxl dns hd & dol pelsparite some some calc p ø
6200 - 6210	55	SH	aa v dol
	10	SLTST	gybrn-off wh aren fri dol cmt
	20	ANHY	aa
	15	DOL	aa

6210 - 6220	20	SLTST	gybrn-dkgy aren vfri dol cmt tight some dd blk stn nsofc
	30	SH	aa grdg to rthy dol
	20	DOL	aa tan-gy cht frags
	10	ANHY	wh-trnsl xln & wh chk
6220 - 6230	20	SLTST	aa
	40	SH	aa
	40	DOL	gybrn micxl dol pel sparite & wh suc dol g ø (probably a lot of this was ground up & lost) nsofc
6230 - 6240	40	SH	aa
	10	SLTST	aa
	50	DOL	aa p spl
6240 - 6250	40	SH	gy-dkgy blky slty dol grdg to rthy dol
	20	DOL	gybrn-gy micxl pel ip dolpelsparite w/abun suc ø est 8% ø nsofc
	25	DOL	dkgy-bybrn rthy slty arg
	10	SLTST	aa
	5	ANHY	wh chk p spl
6250 - 6260	40	SH	aa
	45	DOL	rthy aa
	15	ANHY	aa p spl
6260 - 6335	100	SA	(all salt dissolved) spls sh & dol aa

FORMATION TOPS

FORMATION	IRON SPRINGS #1-3 E-LOG	SUBSEA	WHITE CANYON #4 SITTON SUBSEA	SKELLY #1 SUMMIT PT. SUBSEA
JURASSIC				
MORRISON FM.	245'	+6497'	+6550'	+6878'
ENTRADA SS.	1060'	+5682'	+5756'	+6070'
DEWEY BRIDGE MBR.	1196'	+5546'	+5595'	+5897'
TRIASSIC				
NAVAJO SS	1243'	+5499'	+5563'	+5839'
KAYENTA FM.	1595'	+5147'	+5220'	+5534'
WINGATE SS.	1790'	+4952'	+5026'	+5342'
CHINLE FM.	2010'	+4732'	+4780'	+5055'
HITE BED	2010'	+4732'	-	
LIMY MBR.	2096'	+4646'	-	
MOSSBACK MBR.	2491'	+4251'	+4247'	+4640'?
MOENKOPI FM.	2596'	+4246'	+4162'	+4497
PERMIAN				
CUTTER FM.	2631'	+4111'	+4140'	+4482'
PENNSYLVANIAN				
HERMOSA GROUP				
HONAKER TRAIL FM.	4471'	+2271'	+2364'	+2680'
PARADOX FM.	5640'	+1102'	+1198'	+1306'
SITTON (A)	5640'	+1102'	+1198'	+1306'
BOUNDARY BUTTE SH.	5676'	+1066'	-	-
UPPER ISMAY	5761'	+ 981'	+1030'	+1073'
HOVENWEEP SH.	5894'	+ 848'	+ 964'	+ 967'
LOWER ISMAY	5961'	+ 781'	+ 901'	+ 919'
GOTHIC SH.	6007'	+ 735'	+ 845'	+ 862'
UPPER DESERT CREEK	6093'	+ 649'	+ 780'	+ 781'
UPPER DESERT CREEK SALT	ABSENT		ABSENT	+ 760'
LOWER DESERT CREEK SALT	6133'	+ 609'	+ 727'	+ 681'
LOWER DESERT CREEK PAY	6193'	+ 549'	?	+ 585'
CHIMNEY ROCK SH.	6216'	+ 526'	+ 701'	+ 559'
AKAH	6237'	+ 505'	-	+ 556'
AKAH SALT	6258'	+ 484'	-	+ 507'

GEOLOGIC SUMMARY AND ZONES OF INTEREST

Geologic coverage of Transco Exploration Company's #1-3 Iron Springs SE SW SE Sec 13-T33S-R25E San Juan County, Utah, began in the Triassic Chinle Formation at 2090 feet to a total depth of 6339 feet.

CHINLE FORMATION, TOP AT 2010'

The Triassic Chinle Formation top was marked by a change from aeolian sands of the Wingate to continental flood plain deposits of shale, silt and sandstone. Two members of the Chinle Formation, in particular, were noted.

LIMY MEMBER, TOP AT 2096'

The Limy Member consisted of brown, reddish-brown, and orange brown platy, brittle shales that were sometimes mottled with greenish-gray spots and anhydrite inclusions. There were thin beds of orange to red brown argillaceous siltstones. The shales and silts were sometimes calcareous.

MOSSBACK MEMBER, TOP AT 2491'

The Mossback Member top was picked at the top of massive sandstones and limestone conglomerate. The Mossback consisted of varicolored, very fine to moderate grained sandstones with mica flakes and dark minerals of various types predominantly clay cemented. There were abundant chert fragments and limestone nodules that were conglomeritic. The limestone conglomerate here identifies this sandstone body as the Mossback as limestone is rare in the Shinarump Member. Also, the Shinarump is very local in extant and confined to an area south in an area from the Bears Ears to the Hite area (Sullivan, 1975, p. 135-136).

MOENKOPI FORMATION, TOP AT 2596'

The Triassic Moenkopi was very thin here, probably due to the thickness of the Mossback Member as the contact between them is an erosional unconformity. The Moenkopi was a silty, brown to orange-brown shale with minor amounts of nodular limestone.

CUTLER FORMATION, TOP AT 2631'

The top of the Cutler Formation of Permian Age was marked by an orange-white fine to medium grained sandstone, silica or clay cemented with occasional glauconite inclusions.

The Cutler consisted of reddish-brown to orange-brown silty, micaceous shales with occasional anhydrite inclusions and orange-brown to brown, argillaceous, micaceous siltstones that were partly calcareous. Scattered throughout the Cutler Formation were sandstone bodies, generally thin, ranging in color from orange to brown to white, silty to moderate grained and predominantly clay cemented. There were some coarse to very coarse grained sands with chert fragments that were loosely consolidated in samples. A minor show of methane was observed at 4428'-4446' in a fine to medium grained, angular to subangular, predominantly unconsolidated sandstone.

HONAKER TRAIL FORMATION, TOP AT 4471'

The Pennsylvanian Honaker Trail Formation top was picked as the first fossilferous limestone encountered. The Honaker Trail Formation was observed to be a nearshore marine to coastal continental deposit as evidenced by moderately thick limestones, abundant redbed clastics and channel sands.

These sands were light gray to white, occasionally light brown, very fine to moderate grained calcareous with silica or clay cementing with mica and glauconite accessories. The porosities in the sands were generally poor to fair. Hydrocarbon gas increases were observed in nearly all of these sands but only small amounts of methane were detected.

The limestone fragments were divided into two types: white to cream-colored chalky micrite and gray-brown to dark brown carbonate mudstone which was identified as matrix or mud-size grain dense limestone; and, white to gray-brown and gray bioclastics, fossils, pellets, oolites, and other organic material. Fossils noted were crinoid columnals and algal leaves. There were abundant unrecognizable fossil fragments scattered throughout. Several of these limestones had drilling breaks in them but only small amounts of methane were detected. A 70-unit gas show from 5402' to 5410' was observed with C_1, C_2, C_3 and C_4 detected. Dead black asphaltic stain was seen in intergranular voids with no fluorescent show or cut. From 5600' through the bottom of the Honaker Trail 50 to 100 units of total gas and C_1, C_2 and C_3 were observed in tight sands and carbonates with no associated drilling breaks.

PARADOX FORMATION, TOP AT 5640'

The Paradox Formation marks the beginning of cyclic carbonate deposition during middle Pennsylvanian time. These cycles: Sitton, Upper Ismay, Lower Ismay, Desert Creek, and Akah were discussed below.

SITTON, TOP AT 5640'

The Sitton cycle is not recognized except in certain portions of the Paradox Basin due to poor carbonate cycle development. The Sitton at #1-3 Iron Springs was a light gray to white, microcrystalline to cryptocrystalline dense dolomitic limestone, with algal(?) debris and occasional crinoids. The limestone was interbedded with gray-brown primary dolomite that was silty near the Boundary Butte shale contact.

Hydrocarbon shows were not observed in the Sitton. Background gas remained fairly constant from the Honaker Trail Formation.

BOUNDARY BUTTE SHALE, TOP AT 5676'

The Boundary Butte shale was a dark gray brittle silty dolomitic shale with scattered mud pellets. The background gas increased to 60 units with the increase all methane. At 5700 feet the well lost circulation with over 310 barrels mud lost. No samples or gas samples were recovered from 5700-5730'. A DST (#1) was run from 5680-5790' to test the lost circulation zone similar to that in the Mountain States Resources Redd Investment 11-1 (10.8 miles to the west of #1-3 Iron Springs) in the Upper Ismay.

UPPER ISMAY, TOP AT 5761'

The Upper Ismay cycle top was picked at the top of the first bedded anhydrite. Below the anhydrite was 20' of microcrstalline dark gray to grayish brown carbonate mudstone with pellets, crinoid columnals and indistinct fossil fragments. Some intergranular porosity was observed but was anhydrite filled.

At 5790-5801' Core #1 was cut but only one foot of dark gray carbonate mudstone was recovered. Core description can be found elsewhere in this report. Core #2 was cut from 5801-5818' with 15 feet recovered. The core was uniformly dark gray earthy dolomite with the core split almost exactly in half by fractures that were probably caused by stresses released during coring. The true color and lithologic character of the core could be seen by treating the surface briefly with 10% HCl. The cores had poor porosity with little evidence of hydrocarbons except for small gas bubbles along hairline fractures.

Below Core #2 was 16' of dark gray to black, silty limy shale and at 5135-5140' a second bedded anhydrite. Below the anhydrite was 44 feet of light gray to light brown limestone (calcirudite breccia) with pellets, scattered algal leaves and other indistinct fossils. E-log porosities through this carbonate zone were 2-3%, although some of the limestones in the lower section showed ~4-6% intergranular porosity with brown staining, no fluorescence and a very faint yellow crush cut.

Hydrocarbon gas shows in the Upper Ismay occurred during Core #1 with 50-60 units of total gas with methane, ethane and propane and 120 units in the base of the shale (5828-5836'). Total gas fell off in the lower carbonate section.

DST #2 (5830-5966') was run to evaluate the Upper Ismay. 250 feet of gas cut mud was recovered with no gas to surface.

HOVENWEEP SHALE, TOP AT 5894'

The Hovenweep shale was made up of a 35-foot upper section of grayish brown argillaceous, silty, earthy dolomite and 25 feet of dark gray to black silty, carbonaceous limy shale.

Total gas shows of 100 units to 750 units were seen in the Hovenweep Shale. C_1, C_2, C_3, and C_4 were detected throughout the shale.

LOWER ISMAY, TOP AT 5961'

The Lower Ismay was a white to grayish brown limestone (calcirudite breccia) somewhat dolomitized in the upper section with a gray to gray-brown microcrystalline carbonate mudstone in the lower section. Pellets were scattered throughout with crinoid columnals and oolites confined to the upper portions of the Lower Ismay. Poor porosities 2-3% are indicated throughout the Lower Ismay on E-logs. Some of the upper limestones show evidence of recrystallization as secondary dolomite porosity with brown oil staining but this was not well developed. No fluouescent show or cut were observed.

Total gas averaged 10-20 units through the Lower Ismay with no significant increases.

GOTHIC SHALE, TOP AT 6007'

The Gothic Shale, like the Hovenweep Shale, was composed of an upper section of dark gray to brown earthy silty dolomite and a thin bedded dark gray to black carbonaceous shale. A loss of circulation zone in the Upper Gothic Shale (at 6015') was encountered with 100+ barrels lost.

Hydrocarbon shows of C_1, C_2, C_3, and C_4 and total gas of 50-150 units were seen in the Gothic Shale.

DESERT CREEK, TOP AT 6093'

The top of the Desert Creek was not well marked in the samples as little anhydrite was observed. The Desert Creek cycle was made up of a silty, dolomitic shale below the anhydrite and above a 50-foot section of salt (top at 6133'). Below the salt was another bedded anhydrite, silty shale and dolomite and dolomite cemented arenaceous siltstone.

The Desert Creek pay at 6193' was not well observed in samples due to poor sample quality. The pay lithology was a grayish brown crypto-crystalline dolomite (dolpelsparite) with white sucrosic dolomite with shaly stringers. No fluorescent show or cut was observed. Porosity appeared good in the samples but porosities of ~4% were obtained from E-logs. The zone appeared shaly on the logs.

A good 700 unit gas show above a 100-unit background was observed from 6211-6218' with C_1 through C_4 observed.

DST #3 (6204-6399') was run to test the pay zone. Recovery was 75' drilling mud and surface blow was dead during the final flow period. See DST #3 report for more details.

CHIMNEY ROCK SHALE, TOP AT 6221'

Samples were poor at this point but the Chimney Rock was a dark gray silty dolomitic shale.

Total hydrocarbon gas was falling off from the Chimney Rock Shale to TD.

AKAH, TOP AT 6239'

The Akah cycle was thin. Silty dolomites and dolomitic shales made up the Akah above the Akah salt at 6258'.

No shows were observed.

If there are any questions about interpretaion of the log or this report, please feel free to call.

Sincerely

L. Thomas

REFERENCES

1. O'Sullivan, R. B. and Mac Lachlin, M.E. 1975, Triassic Rocks of the Moab-White Canyon Area, Southeastern Utah, Four Corners Geological Society Guidebook, p. 129-141.

DIVISION OF XCO

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TRANSCO EXPLORATION COMPANY

TXPOC, 1-3 IRON SPRINGS

SE SW SE SECTION 3 - T33S - R25E

SAN JUAN COUNTY, UTAH

LOGGING GEOLOGIST: Scott George
Rose Bumanglag

RESUME

OPERATOR:	Transco Exploration Company
WELL NAME & NUMBER:	1-3 Iron Springs
LOCATION:	1,714' FEL, 271' FSL SE SW SE Section 3 - T33S - R25E
COUNTY & STATE:	San Juan County, Utah
SPUD DATE:	December 1, 1984
COMPLETION DATE (TD):	December 16, 1984
ELEVATIONS:	6,728' GL 6,742' KB
TOTAL DEPTH:	6,339' DRLR 6,340' LOGGERS
CONTRACTOR:	Coleman
RIG:	#3
TYPE RIG:	Double
PUMPS:	#1: IDECO 550 5½" x 15" #2: IDECO 550 5" x 15"
ENGINEER:	Al Look
TOOL PUSHER:	Glen Stories
TYPE DRILLING MUD:	Fresh Water - spud to approx. 5,550' Chemical Gel - approx. 5,550' to TD
MUD COMPANY:	N L Baroid
MUD ENGINEER:	Pen Penfield
HOLE SIZES:	12¼" 100'-2,090' 8-3/4" 2,090'-6,339'
CASING:	9-5/8" to 2,090'
MUD LOGGING BY:	Analex; Scott George, Rose Bumanglag - Geologists
TYPE UNIT:	2-Geologists, FID Total Hydrocarbon Analyzer, FID Gas Chromatograph
CORE INTERVALS:	#1: 5,790'-5,801' #2: 5,801'-5,818'
DST DEPTHS:	#1: 5,680'-5,791' #2: 5,830'-5,966' #3: 6,204'-6,339'
DST COMPANY:	Halliburton
ELECTRIC LOGS BY:	Gearhart Industries
TYPE LOGS RUN:	Dual Induction Laterolog, BHC Sonic Log, Dual Laterolog, Compensated Density-Conpensated Neutron Log, Dipmeter, Temperature Log
LOGGING ENGINEER:	Baker
BOTTOM FORMATION:	Akah Salt
WELL STATUS:	Plugged & Abandoned

GEOLOGICAL SUMMARY

Transco Exploration's TXPOC 1-3 Iron Springs well was spudded on December 1, 1984 and drilling was completed on December 16, 1984 by Coleman Drilling.

The 1-3 Iron Springs prospect was based on a seismic anomaly indicating a possible algal-mound carbonate buildup in the Upper Ismay Cycle of the Paradox formation. Secondary objectives included the Lower Ismay, the Lower Desert Creek Porosity, and any of the Honaker Trail Sandstones or Carbonates.

From the core data available (core reports #1 & #2), drill stem tests (DST reports #1-3), and electric log information, the 1-3 Iron Springs was drilled in a normal marine cycle of the Upper Ismay. The lithology and fossils (forams & crinoids) in Core #1 indicate an off-mound low energy environment. No ivanovia algae or algae structures were noted.

A weak dolomitic porosity zone was developed in the Lower Desert Creek (6,200'-6,218'), but upon evaluation (see DST #3), this zone was found to be unproductive.

On December 20, 1984, a decision was made to plug and abandon the TXPOC 1-3 Iron Springs.

FORMATION SUMMARY

Mancos (Cretaceous) - surface

Dakota (Cretaceous) - Top sealed off by conductor to 100'. Logging started at 200'. Samples consisted of clear, very fine to coarse grained sandstone with good porosity, and varigated shales. The Dakota drilled at an average of 1 to 2 min/ft and produced no oil or gas shows.

Morrison (Jurassic) - Encountered at a depth of 256' (+6,488' subsea), and consisted of varigated shales white-clear to light orange, very fine to coarse grained sandstone, and a trace of tight lime mudstones. The Morrison drilled at an average of 1 to 2 min/ft and produced no oil or gas shows.

Summerville (Jurassic) - Also referred to as the Lower Morrison in this area. Encountered at 1,004' (+5,738' subsea). The Summerville at this location consists of very fine to fine grained, unconsolidated to poorly cemented, light orange sandstone, and light orange to redbrown siltstones and shales. The Summerville drilled at an average of .6 to 1.0 min/ft and produced no sample or gas shows.

Entrada (Jurassic) - Encountered at 1,066' (+5,678' subsea). Entrada lithology is composed of light orange to white, very fine to occasionally medium grained, unconsolidated to moderately cemented sandstone, with a trace of orange siltstones. No shows were detected in the Entrada, and the drill rate averaged .1 to .2 min/ft.

Carmel (Jurassic) - Also referred to as the Dewey Bridge Member of the Entrada Sandstone and was encountered at 1,202' +5,540' subsea). The Carmel drilled at .8 to 1.0 min/ft as compared to the overlying .2 min/ft in the Entrada and the underlying .2 to .4 min/ft in the Navajo, but show little change in lithology. The Carmel samples showed redbrown and green shales and siltstones, and very fine to medium grained, orange, unconsolidated to moderately cemented sandstones. No limestones were encountered, but samples were poor due to fast drill rate and fresh water mud. No oil or gas shows were produced.

Navajo (Jurassic) - Topped at 1,250' (+5,492' subsea). The Navajo consisted of very fine to medium grained, light orange, poorly to moderately cemented sandstone. The Navajo drilled at an average of .2 to .4 min/ft and produced no gas or oil shows.

Kayenta (Jurassic) - Cut at 1,576' (+5,166' subsea). The Kayenta consists of very fine to occasionally medium grained, poor to moderately cemented, redbrown to orange sandstone, and redbrown, silty shale. The Kayenta also contained a trace of carbonaceous inclusions. The Kayenta slowed to a drill rate of 1.0 to 1.5 min/ft and contained no oil or gas shows.

Wingate Sandstone (Triassic) - Topped at 1,790' (+4,952' subsea) and is composed of orange to redbrown, fine to medium grained sandstone. No shows were encountered and drill rate averaged .5 to 1.5 min/ft.

Chinle (Triassic) - Encountered at 2,006' (+4,738' subsea) with a log top of 2,010'. The Chinle consists of redbrown siltstones and shales and drilled at an average 2 to 3 min/ft. Casing was set at 2,095'. 9-5/8" casing was set at 2,090' to seal off possible water gain or mud loss from the overlying Navajo,

FORMATION SUMMARY (Cont.)

Kayenta and Wingate Sandstones. 8-3/4" hole was drilled through the remainder of the Chinle shales and siltstones at a rate of 1 to 1.5 min/ft. No shows were seen in the Chinle.

Shinarump (Triassic) - Also known as the Moss Back in this area, the Shinarump was encountered at 2,494' (+4,248' subsea) with a log top at 2,491' (+4,251' subsea). The Moss Back, a channel deposit formed on the erosional surface of the Moenkopi, is a lithologic mixture of white to light pink cryptocrystalline limestone nodules, orange-brown to green shale, and white to light gray, fine to medium grained, poorly sorted sandstone. The Moss Back drilled at an average of .5 to 1.5 min/ft and produced no oil or gas shows.

Moenkopi (Triassic) - Topped at 2,600' (+4,141' subsea) and is composed of orange-red to redbrown, silty to sandy shales, and a trace of white to light gray, cryptocrystalline lime mudstones. The Moenkopi drilled at an average of 1-1.5 min/ft with fresh water, and produced no oil or gas shows.

Cutler (Permian) - Topped at 2,650' (+4,092' subsea) with a log top at 2,631' (+4,111' subsea). Composed of orange to redbrown shales and siltstones, and very fine to medium grained, generally poorly sorted, poorly cemented sandstone. The Cutler also contains a trace of white to light gray cryptocrystalline limestone. The Cutler drilled from .5 to 2 min/ft and contains no shows.

Honaker Trail (Pennsylvanian) - Top was picked at the first massive limestone at 4,480' (+2,262' subsea), with a log top at 4,470' (+2,272' subsea), 47' low to prognosis. The top of the Honaker Trail was also marked by a slight increase in background gas, from 1-2 units to 3-15 units, composed of methane. The Honaker Trail consists of alternating beds of white-light gray, pink to brown, clean to slightly argillaceous crypto-microcrystalline lime mudstone, brown to redbrown shales and siltstones, and clear to brown-gray, very fine to medium grained, poor to moderately sorted sandstones. Although many of the Honaker Trail carbonate and sandstone beds were associated with drilling breaks (from .5 to 1.5 min/ft) and slight gas increases (from 3 to 15 units), no significant shows were encountered and further evaluation was not recommended.

Paradox (Pennsylvanian) - Encountered at 5,002' (+1,740' subsea). The Paradox consists of light buff-brown to dark graybrown, clean to very argillaceous, crypto-microcrystalline, lime mudstone, orange to white-gray mica siltstones, clear to light green, very fine grained sandstones, and dark gray to black, occasionally carbonaceous shales. Gas increases were associated with black shales. A 20 unit gas increase was associated with a drilling break and sandstone at 5,204' to 5,213'. There was no sample show and further evaluation was not recommended. No other significant shows were encountered in the Paradox Cycle. The Paradox drilled at an average rate of 1 to 2.5 min/ft.

Sitton "A" Cycle of the Paradox (Pennsylvanian) - Topped at 5,596' (+1,146' subsea) with a log top at 5,606' (+1,136' subsea), 17' low to prognosis. The Sitton "A" consists of slightly to very argillaceous, light to dark brown, crypto-microcrystalline lime mudstones and packstones, black slightly carbonaceous, calcareous shales, with a thin, light gray to white, very fine grained sandstone at 5,596' to 5,606', and a light gray to light brown, crypto-microcrystalline dolomite mudstone at 5,646' to 5,654' (possible top of Sitton "A"). The Sitton "A"

drilled at an average of 2 min/ft and contained no oil or significant gas shows. Lost circulation was encountered at approximately 5,680' to 5,730' and approximately 5,750' to 5,768', resulting in no samples from 5,700' to 5,730' and no gas readings from 5,688' to 5,722' and 5,750' to 5,768'. DST #1 was run from 5,680' to 5,791' in hope of production out of these lost circulation zones (See DST #1 Report). DST #1 results indicated no hydrocarbon production from these zones in the Sitton "A".

Upper Ismay Cycle of the Paradox (Pennsylvanian) - Topped at 5,766' (+976' subsea) with a log top at 5,760' (+982' subsea), 3' low to prognosis. The Upper Ismay top was called at the first trace of anhydrite in the samples. Cores #1 and #2 were run in the Upper Ismay carbonate to determine if an algal-plate-mound cycle had been drilled as per prognosis. Core #1 (see report) recovered only 1' of core and seems to indicate a normal carbonate cycle was encountered (see summary). Core #2 (see report) recovered 16' of dark brown to black, dolomitic-calcareous shale. A lower carbonate unit of the Upper Ismay was encountered at 5,840' to 5,890' and consists of cream to white, crypto to very fine crystalline, clean lime mudstones. No oil or gas shows were encountered in the Upper Ismay. The lower carbonate unit of the Upper Ismay was included in DST #2, 5,830'-5,966', with negative results. The Upper Ismay from 5,760' to 5,790' was included in DST #1, also with negative results. Electric logs show little or no porosity in the Upper Ismay.

Hovenweep Shale (Pennsylvanian) - Encountered at 5,890' (+852' subsea) with a log top of 5,894' (+848' subsea), 28' low to prognosis. The Hovenweep consists of dolomitic, dark graybrown to black shale. The Hovenweep drilled at an average of 3 min/ft and produced 80 to 200 units of total gas, composed primarily of methane. No significant gas or oil shows were encountered in the Hovenweep Shale. The Hovenweep was included in DST #2, with negative results.

Lower Ismay (Pennsylvanian) - Topped at 5,962' (+780' subsea) with a sample top at 5,952' (+790' subsea), 36' low to prognosis. The very top of the Lower Ismay produced a 600 unit gas increase associated with a drilling break from 5,952' to 5,958'. The gas from this break was composed primarily of methane, with ethane, propane and a trace of iso-butane. The gas from this zone appears on electric logs to have been produced by a highly carbonaceous shale bed. DST #2 (5,830'-5,966') was run to evaluate this zone with negative results.

Gothic Shale (Pennsylvanian) - Topped at 6,006' (+736' subsea), with a log top at 6,007' (+735' subsea), 25' low to prognosis. The Gothic is composed of black to dark graybrown dolomitic to calcareous, carbonaceous shale, grading to earthy dolomite. The Gothic was marked by an increase in shale gas but no shows were encountered. The Gothic drilled at an average of 3 to 5 min/ft.

Upper Desert Creek (Pennsylvanian) - The top was determined by electric logs at 6,094' (+648' subsea), 47' low to prognosis. The Upper Desert Creek is composed of a massive anhydrite from 6,094' to 6,109' and calcareous to dolomitic, black to dark graybrown shale, interbedded with small amounts of micro-very fine crystalline, slightly argillaceous, brown limestone. Samples were poor after drilling the anhydrite. Gas readings were not available from 6,106' to 6,122' due to complete shaker bypass. No sample shows were encountered. The Upper Desert Creek drilled at 2 to 5 min/ft.

FORMATION SUMMARY (Cont.)

Upper Desert Creek Salt (Pennsylvanian) - Absent from prognosis. The Lower Desert Creek Salt was topped at 6,134' and drilled at an average of .8 min/ft to 6,181'. The base of the salt was marked by a massive anhydrite from 6,181' to 6,194'

Lower Desert Creek Pay (Pennsylvanian) - Encountered at 6,190' (+522' subsea), with a log top at 6,194' (+548' subsea), 31' low to prognosis. Samples were poor throughout this section due to the overlying anhydrite and salt. Porosity was developed in the Lower Desert Creek from 6,200'-6,218' (see logs). This zone was associated with a drilling break 1.5-2.5 min/ft from 4 min/ft, and a gas increase from approximately 100-150 units to 700 units in the bottom of this section. The gas was composed of methane, ethane, propane, and iso-butane (see mudlog). Samples showed silty-argillaceous, micro-very fine crystalline, sucrosic brown dolomite. This dolomite shows poor to fair intercrystalline porosity with possible poor vuggy porosity. No oil stain, fluorescence or fluorescent cut was encountered. Logs show 5-9% porosity in this zone, the best at 6,206'-6,208'. DST #3 (6,204'-6,339') was run to evaluate this porosity zone. Results from this test were negative (see DST #3 report).

Chimney Rock Shale (Pennsylvanian) - The top was called on logs at 6,218' (+524' subsea) and is composed of black to dark graybrown, calcareous to dolomitic shale. Again, samples were poor throughout this section due to anhydrite and salt contamination. The Chimney Rock drilled at an average of 2 min/ft.

Akah Cycle of the Paradox (Pennsylvanian) - Encountered at the top of a massive anhydrite zone at 6,237' (+505' subsea). The Akah becomes shaley from 6,250'-6,258'. Drill rate ranged from 2-4 min/ft and no shows were encountered.

Akah Salt (Pennsylvanian) - Topped at 6,258' (+484' subsea) and drilled at an average of .8 to 1.0 min/ft to a total depth of 6,339'.

Drilling stopped at 3:00 p.m. December 16, 1984 at a total depth of 6,339'. A decision was made on December 20th to plug and abandon the TXPOC 1-3 Iron Springs.

Form OGC-1b

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

2

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER P & A

2. NAME OF OPERATOR
TXP Operating Company (713) 439-3502
By: Transco Exploration Co. ATTN: John Rosata, Jr.

3. ADDRESS OF OPERATOR
P.O. Box 1396, Houston, Texas 77251

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
271' FSL, 1714' FEL of Section 3 (SW 1/4 SE 1/4)

5. LEASE DESIGNATION AND SERIAL NO.: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: --

7. UNIT AGREEMENT NAME: --

8. FARM OR LEASE NAME: TXP - Iron Springs

9. WELL NO.: 1-3

10. FIELD AND POOL, OR WILDCAT: Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA: Sec. 3, T33S, R25E

14. PERMIT NO.: 43-037-31106

15. ELEVATIONS (Show whether DF, RT, GR, etc.): 6728.3 (ground elevation)

12. COUNTY OR PARISH: San Juan

13. STATE: Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	☐
REPAIR WELL	☐	CHANGE PLANS	☐	(Other) Restoration of location			XX
(Other)			☐	(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

The subject location was cleaned up and rehabilitated pursuant to the landowner's stipulations with the work completed on January 14, 1985. TXP Operating Company requests that this site be inspected.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Drilling Superintendent DATE 01-23-85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

Form OGC-1b

3

IT IN TRIPLICATE*
(other instructions on reverse side)

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER P & A

2. NAME OF OPERATOR
TXP Operating Company (713) 439-3502
by Transco Exploration Co. Attn: John Rosata, JR.

3. ADDRESS OF OPERATOR
P.O. Box 1396, Houston, TX 77251

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
271' FSL, 1714' FEL of Section 3 (SW 1/4 SE 1/4)

5. LEASE DESIGNATION AND SERIAL NO.
Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
--

7. UNIT AGREEMENT NAME
--

8. FARM OR LEASE NAME
TXP - Iron Springs

9. WELL NO.
1-3

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Sec. 3, T33S, R25E

14. PERMIT NO.	15. ELEVATIONS (Show whether DF, RT, GR, etc.)	12. COUNTY OR PARISH	13. STATE
43-037-31106	6728.2 (ground elevation)	San Juan	Utah

16. **Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data**

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	X
REPAIR WELL	☐	CHANGE PLANS	☐	(Other)			☐
(Other)	☐			(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

TD: 6330'
13-3/8"casing driven to 100'.
9-5/8" casing set at 2090'. Cemented w/800 sacks.
8-1/2" hole drilled to TD.

Verbal Approval granted by John Baza on 12-20-84 to plug and abandon as indicated below:

Set packer at 6204'. POOH. WIH to 6140'. Pumped 35 sacks of Class B from 6140' - 6040'. POOH to 5810'. Pumped 35 sacks of Class B from 5810' - 5710'. Pumped 36 sacks of Class B from 2140' - 2040'. POOH. L/D drill pipe. N/D BOP's. Cut off wellhead. Set cement plug at 85' w/25 sacks of Class B (65' plug in 9-5/8" casing). L/D drill pipe. Released rig at 0900 hours on 12-21-84.

APPROVED BY THE STATE
OF UTAH DIVISION OF
OIL, GAS, AND MINING
DATE: 2/5/85
BY: John R. Baza

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE Drilling Superintendent DATE 01-25-85

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

CORE LABORATORIES, INC.
Petroleum Reservoir Engineering
DALLAS, TEXAS

CORE ANALYSIS REPORT

FOR

TXP OPERATING COMPANY

1-3 IRON SPRINGS
WILDCAT
SAN JUAN, UTAH

CORE LABORATORIES, INC.

Petroleum Reservoir Engineering

DALLAS, TEXAS

TXP OPERATING COMPANY
1-3 IRON SPRINGS
WILDCAT
SAN JUAN,UTAH

DATE : 18-DEC-1984
FORMATION : ISMAY & HOVENWEEP
DRLG. FLUID: WBM
LOCATION : SE,SW,SE SEC. 3-T33S-R25E

FILE NO : 3803-003368
ANALYSTS : DS;EV
ELEVATION: 6741 KB

CONVENTIONAL ANALYSIS-B.L. POROSITY

SAMPLE NUMBER	DEPTH	PERM. TO AIR (MD) MAXIMUM	90 DEG	POR. He	FLUID SATS. OIL	WTR	GRAIN DEN	DESCRIPTION
1	5790.0-91.0	<0.01	*	1.0	0.0	22.6	2.72	LM DKGRY VFXLN
	5791.0-01.0							CORE LOSS
2	5801.0-02.0	<0.01	*	0.9	0.0	77.9	2.73	LM DKGRY VFXLN SL/DOL SL/SHY
3	5802.0-03.0	<0.01	*	0.8	0.0	87.2	2.72	LM DKGRY VFXLN SL/DOL SL/SHY
4	5803.0-04.0	<0.01	*	2.0	0.0	79.3	2.72	LM DKGRY VFXLN SL/DOL SL/SHY
5	5804.0-05.0	<0.01	*	2.2	0.0	89.3	2.72	LM DKGRY VFXLN SL/DOL SL/SHY
	5805.0-16.0							SHALE -- NO ANALYSIS
	5816.0-18.0							CORE LOSS

* SAMPLE NOT SUITABLE FOR FULL DIAMETER ANALYSIS

CORE LABORATORIES, INC. CORE LAB *Petroleum Reservoir Engineering*

TXP OPERATING COMPANY — FILE NO. 3803-003368
1-3 IRON SPRINGS — DATE 18-DEC-1984
WILDCAT — FORMATION PARADOX — ELEV. 6741 KB
SAN JUAN — STATE UTAH — DRLG. FLD. WBM — CORES
N SE,SW,SE SEC. 3-T33S-R25E

CORRELATION COREGRAPH

VERTICAL SCALE: 5" = 100'

Total Wat
PERCENT POR
100 80 60 4

mma Ray
ION INCREASE
OX FORMATION

NE
-5801(10' core loss)
P SHALE
-5818(2' core loss)

Permeability
MILLIDARCIES
100 10 1.0 .1

Depth Feet
5750
5800
5850

Porosity
PERCENT
30 20 10 0

Oil Saturat
PERCENT POR
0 20 40 6

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY TXP OPERATING COMPANY — FILE NO. 3883-003368
WELL # 1-3 IRON SPRINGS — DATE 18-DEC-1984
FIELD WILDCAT — FORMATION PARADOX — ELEV. 6741 KB
COUNTY SAN JUAN — STATE UTAH — DRLG. FLD. WBM — CORES
LOCATION SE.SW.SE SEC. 3-T33S-R25E

CORRELATION COREGRAPH

VERTICAL SCALE: 5" = 100'

Total Water ____
PERCENT PORE SPACE
100 80 60 40 20 0

Gamma Ray
RADIATION INCREASE →
PARADOX FORMATION

Permeability ____
MILLIDARCIES
100 10 1.0 .1

Depth Feet
5750

Porosity ____
PERCENT
30 20 10 0

Oil Saturation
PERCENT PORE SPACE
0 20 40 60 80 100

CORE LABORATORIES, INC. *Petroleum Reservoir Engineering*

COMPANY TXP OPERATING COMPANY — FILE NO. 3883-003368
WELL # 1-3 IRON SPRINGS — DATE 18-DEC-1984
FIELD WILDCAT — FORMATION PARADOX — ELEV. 6741 KB
COUNTY SAN JUAN — STATE UTAH — DRLG. FLD. WBM — CORES
LOCATION SE,SW,SE SEC. 3-T33S-R25E

CORRELATION COREGRAPH

VERTICAL SCALE: 5" = 100'

Gamma Ray
RADIATION INCREASE →
PARADOX FORMATION

Permeability
MILLIDARCIES
100 10 1.0 .1

Depth Feet

Porosity
PERCENT
30 20 10 0

Total Water
PERCENT PORE SPACE
100 80 60 40 20 0

Oil Saturation
PERCENT PORE SPACE
0 0 20 40 60 80 100

ISMAY ZONE
c-1 5790-5801(10' core loss)

HOVENWEEP SHALE
c-2 5801-5818(2' core loss)

5750
5800
5850

TXP Operating Company
A Limited Partnership
Transco Exploration Company, Managing General Partner

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

January 25, 1985

Department of Natural Resources
Division of Oil, Gas, and Mining
355 West North Temple
Three Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attention: John Baza

Regarding: TXP - Iron Springs #1-3
Wildcat Field
Section 3, T33S, R25E
San Juan County, Utah

Gentlemen:

Attached in triplicate are two Sundry Notices for the above referenced well. One is for restoration of location and the other for plugging and abandonment. Additionally, attached in duplicate is a Report of Operations and Well Status Report for this well. A Well Completion Report will be submitted to you at a later date under separate cover.

If you require additional information, please contact me at (713) 439-3502.

Sincerely,

TXP OPERATING COMPANY
By: Transco Exploration Company
its Managing General Partner

John Rosata, Jr. - Supervisor
Regulatory and Environmental Affairs

JRJ/lb

Attachments

TXP Operating Company
A Limited Partnership
Transco Exploration Company, Managing General Partner

One United Bank Center
1700 Lincoln, Suite 2100
Denver, Colorado 80203
303-863-3600

February 19, 1985

State of Utah
Division of Oil, Gas & Mining
4241 State Office Bldg
Salt Lake City, Utah 84114

Dear Sir:

Enclosed please find one copy of the Four-Electrode Dipmeter Survey log and one copy of the Four-Electrode Dipmeter Computed Results log for the following well:

Transco Exploration Partners Operating Co.
1-3 Iron Springs
Sec 3-T33S-R25E
San Juan County, Utah

Sincerely,

Bruce H. Wiley
Senior Exploration Geologist
TXP Operating Company

GEARHART
THE GO COMPANY

PRINT DISTRIBUTION LIST

CUSTOMER TRANSCO EXPLORATION COMPANY Field WILDCAT

Well Name IRON SPRINGS 1-3 County SAN JUAN State UTAH

Type of Logs Distributed DLL/MSFL/B.H.CS/DIL/GR/CDL/CNL/GR/Temp. Date 12-18-84

This Distribution List Authorized By TRANSCO EXPLORATION COMPANY

Original Log(s) Retained by Gearhart Ind., Inc., Pending Possible Other Runs ☐

The Original Log(s) and Distribution List Sent to:

No. Of Copies Of Each Log		
2	COMPANY	TXP Operating Company
	PERSON	Bruce Wiley
	ADDRESS	One United Bank Center
Denver,CO.		1700 Lincoln,Ste 2100 (80203)
1	COMPANY	Lear Petroleum Exploration
	PERSON	Bob Gross
	ADDRESS	950 One Energy Square
Dallas,TX.		4925 Greenville Ave (75206)
3	COMPANY	Joan Chorney
	PERSON	Sam Boltz
	ADDRESS	555 17th St-Suite 1000
		Denver,CO.80202-3910
2	COMPANY	Lear Petroleum Exploration
	PERSON	Les Niemi
80202	ADDRESS	City Center IV
Denver,CO.		1801 California St-Ste 4800
CONFIDENTIAL		
1	COMPANY	State of Utah Div.of Oil,Gas
	PERSON	& Mining
	ADDRESS	4241 State Office Bldg
		Salt Lake City,UT.84114
	COMPANY	
	PERSON	
	ADDRESS	

Company
Person
Address

No. Of Copies Of Each Log

COMPANY
PERSON
ADDRESS

COMPANY
PERSON
ADDRESS

COMPANY
PERSON
ADDRESS

COMPANY
PERSON
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COMPANY
PERSON
ADDRESS

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PERSON
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Prints Mailed From Farmington,NM.87401 1-2-85

This Distribution List Completed By Jimmie Cooper/Dftsmn-P.C.

WS-466 7-80

GEARHART THE GO COMPANY

PRINT DISTRIBUTION FORM

Company TRANSCO EXPLORATION CO Well Iron Springs #1-3 Field Wildcat

Location 3-33S-25E County San Juan State Utah

District Farmington Engineer Head S.O. No. 12-19-84 (Important)

Log Type DIPMETER

IMPORTANT

Check One of the Following

Final Run ..... ☒

Hole For Another Run ..... ☐

Another Run Questionable ..... ☐

Customer Should Be Contacted

Mail Film To TXP Operating Co.
1700 Lincoln Suite2100
Denver, CO 80203

Customer's Agent Bruce Wiley

Sepia Transparency Prints Requested	Number of Final Prints Requested	Mail To (Name and Address)
1	2	TXP Operating Co. above address Attn: Bruce Wiley
	1	State of Utah Division of Oil , Gas & Mining c/o TXP Operating Co. above address
	3	Joan Chorney 555 17th Street Suite 1000 Denver, CO 80202-3910
	2	~~Attn: Sam Boltz~~ Lear Petroleum Exploration 1801 California St. Suite 4800 Denver, CO 80202
	1	~~Attn: Les Niemi~~ Lear Petroleum Exploration 4925 Green ville Ave #950 Dallas, TX 75206
		~~Attn: Bob Gross~~

DISTRIBUTION: *White Copy*, Print Center • *Yellow Copy*, Customer • *Pink Copy*, District File

TXP Operating Company
A Limited Partnership
Transco Exploration Company, Managing General Partner

One United Bank Center
1700 Lincoln, Suite 2100
Denver, Colorado 80203
303-863-3600

February 20, 1985

State of Utah
Division of Oil, Gas & Mining
4241 State Office Bldg
Salt Lake City, Utah 84114

Re: Ground Elevation Correction
TXPOC, 1-3 Iron Springs
Sec 3-T33S-R25E
San Juan Co., Utah

Dear Sir:

Please note that the ground elevation, derrick floor, and Kelly bushing are incorrectly shown as GL 6728, DF 6741, and KB 6742 on all field and final prints of logs, mudlogs and wellsite geologists report and strip logs for the referenced well. As indicated on the attached surveyor's plat the correct values are: GL 6768, DF 6781 and KB 6782. Unfortunately this error was not detected until after final prints were distributed. Please make the appropriate changes on your prints.

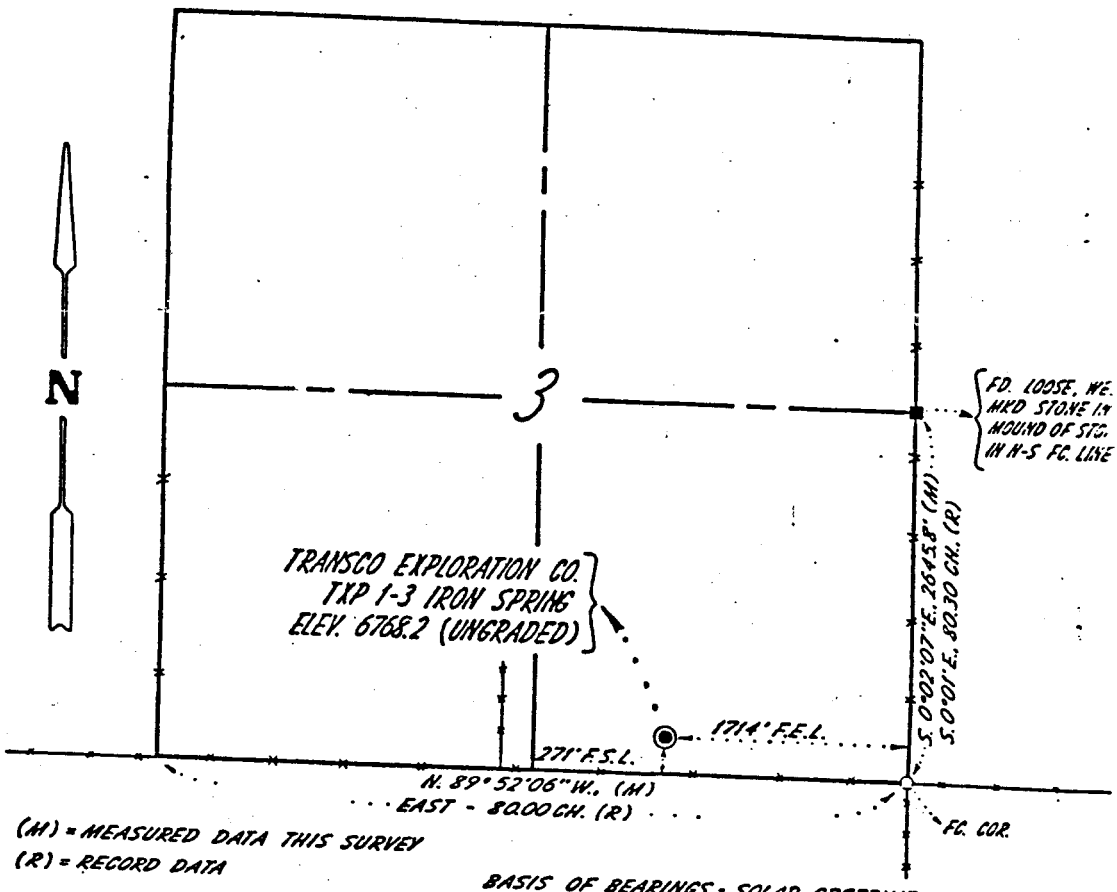
Sincerely,

Bruce H. Wiley

Bruce H. Wiley
Senior Exploration Geologist
TXP Operating Company

PATHFINDER
308 Country Club Road
Suite 306
Casper, Wyoming 82609
(307) 266-3609

T. 33 N., R. 25E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO. UTAH
SECTION 3



(M) = MEASURED DATA THIS SURVEY
(R) = RECORD DATA

SCALE: 1" = 1000'

◉ = SURVEYED WELL LOCATION

PLATTED FIELD NOTES OF A SURVEY MARKING WELL LOCATION TRANSCO EXPLORATION CO. TXP 1-3 IRON SPRING, SW¼ SE¼ SEC. 3, T. 33N., R. 25E., SALT LAKE BASE & MERIDIAN, SAN JUAN CO., UTAH

SURVEYORS CERTIFICATE

STATE OF WYOMING)
COUNTY OF NATRONA) S.S.

I, PAUL A. REID, HEREBY STATE THAT I AM A REGISTERED LAND SURVEYOR IN THE STATE OF UTAH UNDER PROVISIONS OF UTAH LAW. I FURTHER STATE THAT THIS PLAT REPRESENTS A SURVEY MADE UNDER MY DIRECT SUPERVISION AND RESPONSIBILITY BY STEVEN J. MALEY ON NOV. 1, 1984 FOR THE PURPOSE OF AN APPLICATION FOR PERMIT TO DRILL. ANY OTHER USE OF THIS PLAT WITHOUT THE EXPRESSED WRITTEN CONSENT OF THE SURVEYOR IS PROHIBITED.

PAUL A. REID) UTAH REG. L.S. 5669

JOB NO: 109-10/84

DATE: 11-5-84

NOTES: BOOK NO. WL 11
PGS. 33-40

REGISTERED PROFESSIONAL SURVEYOR
PAUL A. REID
5669
STATE OF UTAH

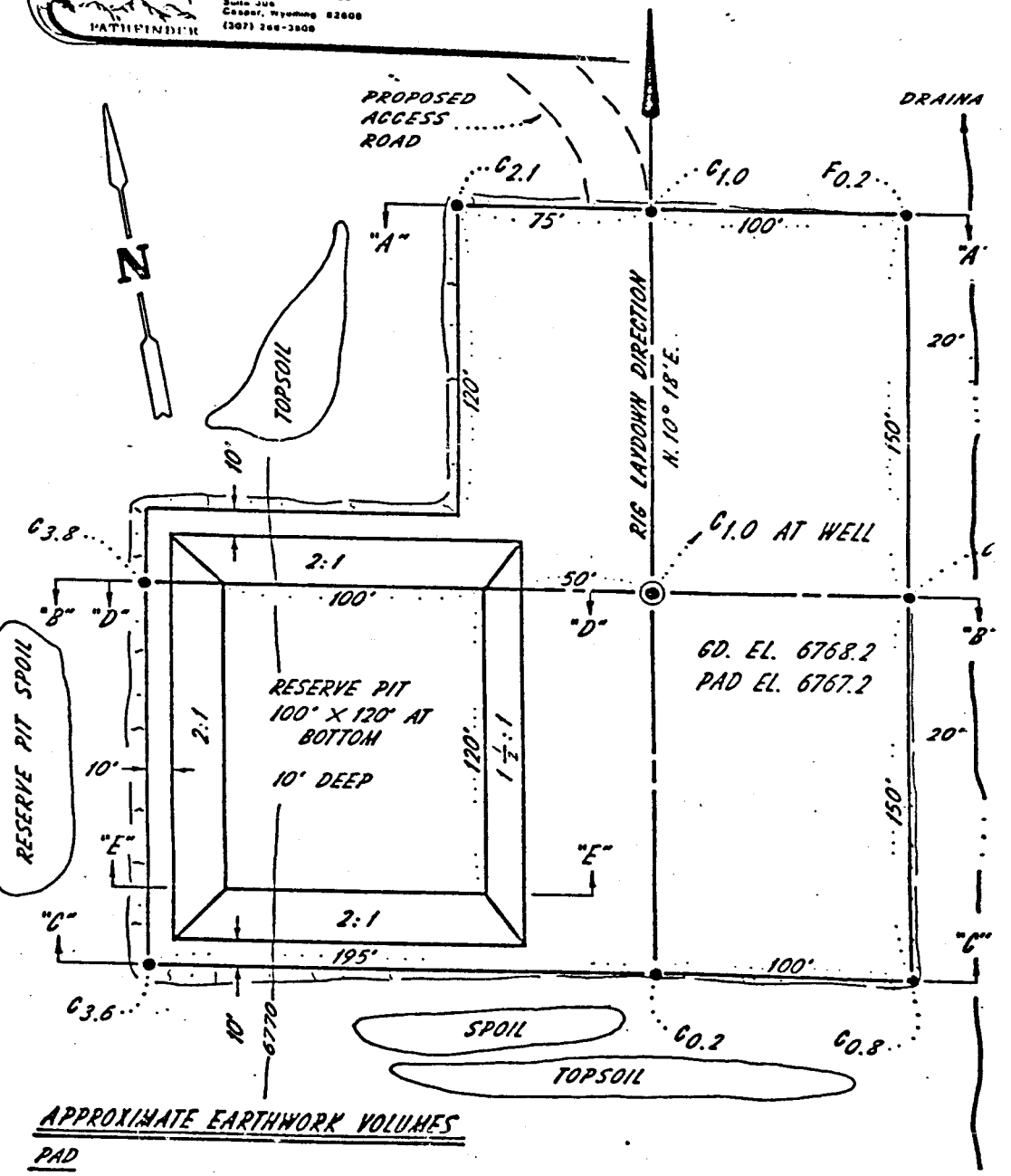
UNGRADED ELEVATION OF TXP 1-3 IRON SPRING 6768.2

UNGRADED ELEVATIONS OF REFERENCE POINTS SET WITH 12" x ½" SPIKES.

NORTH. . . .	.2000	FEET.	6768.5
SOUTH. . . .	"	"	6768.7
EAST	"	"	6767.7
WEST. . . .	"	"	6771.4

BASIS OF ELEVATIONS: US.G.S. 15' QUAD "EASTLAND" ROAD INT. ON [illegible]

PATHFINDER
300 Country Club Road
Suite 305
Casper, Wyoming 82609
(307) 266-3306



APPROXIMATE EARTHWORK VOLUMES

PAD

CUT	2010 CU. YDS.
FILL	425 " "
TOPSOIL . . .	2740 " " AT 12" DEPTH
SPOIL	1585 " "

RESERVE PIT

CUT	6135 CU. YDS.
SPOIL	6135 " "
CAPACITY . . .	29500 BARRELS AT 10' DEPTH

GENERAL WELLSITE TOPOGRAPHY

TRANSO EXPLORATION CO
TXP 1-3 IRON SPRING
SW 1/4 SE 1/4 SEC. 3,
T. 33S., R. 25E., S.L.B. & M.,
SAN JUAN CO., UTAH

SCALE: 1" = 50'

Form OGC-3

SUBMIT IN [illegible] (See other instructions on reverse side)

RECEIVED

FEB 27 1985

DIVISION OF OIL GAS & MINING

56 64 01

15

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other P & A

2. NAME OF OPERATOR
TXP Operating Company (713) 439-3502
by: Transco Exploration Co. ATTN: John Rosata, Jr.

3. ADDRESS OF OPERATOR
P.O. Box 1396, Houston, Texas 77251

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface 271' FSL & 1714' FEL of Section 3 (SW 1/4 SE 1/4)
At top prod. interval reported below --
At total depth SAME

5. LEASE DESIGNATION AND SERIAL NO. Fee
6. IF INDIAN, ALLOTTEE OR TRIBE NAME --
7. UNIT AGREEMENT NAME --
8. FARM OR LEASE NAME TXP- Iron Springs
9. WELL NO. 1-3
10. FIELD AND POOL, OR WILDCAT Wildcat
11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA Sec. 3, T33S, R25E

14. PERMIT NO. 43-037-31106 DATE ISSUED 11-23-84
12. COUNTY OR PARISH San Juan 13. STATE Utah

15. DATE SPUDDED 12-01-84 16. DATE T.D. REACHED 12-16-84 17. DATE COMPL. (*Ready to prod.*) 12-21-84 (P & A) 18. ELEVATIONS (DF, RKB, RT, GR, ETC.)* 6768.2 GL; 6782 RKB 19. ELEV. CASINGHEAD --

20. TOTAL DEPTH, MD & TVD 6339' drlr. 21. PLUG, BACK T.D., MD & TVD -- Surface 22. IF MULTIPLE COMPL., HOW MANY* ------ 23. INTERVALS DRILLED BY → ROTARY TOOLS 10-6330' CABLE TOOLS Rotary

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*
Not Applicable

25. WAS DIRECTIONAL SURVEY MADE No

26. TYPE ELECTRIC AND OTHER LOGS RUN (2 CDL) (F&DS)
DLL/MSFL, DIL/GR, CDL/CNL/GR, BHCS, Temp Log, FEDM (2 samples Geol)

27. WAS WELL CORED Yes ✓

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	drive pipe	100'	--		
9-5/8"	36#/ft.	2090'	12-1/4"	w/800 sacks	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)

31. PERFORATION RECORD (*Interval, size and number*)

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
6140'-6040'	w/35 sacks Class B
5810'-5710'	w/35 sacks Class B
2140'-2040'	w/36 sacks Class B
0'- 85'	w/25 sacks Class B

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
		P & A

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*) TEST WITNESSED BY

35. LIST OF ATTACHMENTS
(Gearhart transmittal enclosed)
Open-hole logs, core analysis, DST reports, and wellsite geologist's report send directly.

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records

SIGNED [signature] TITLE Drilling Superintendent DATE 01-25-85

***(See Instructions and Spaces for Additional Data on Reverse Side)**

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.
If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.
Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.
Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.
Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.
Item 29: *"Sacks Cement":* Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.
Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
Lost circulation 5700-30 (no returns). At 5721 lost 310 bbls. mud.			
DST #1:	5680-5790,	Pennsylvanian Sitton (A zone), op. 210, no ISI, FF, or FSI attempted. IF op w/1 oz (weak blow, incr. to 9 lbs in 210 min., NGTS during IF but 4' flare GTS when released pkrs. Attempted to reverse out pipe recovery, but tool plugged off. Recovery was normally circulated and mud was monitored for gas and oil on HW and chromatograph. Max. 4 on HW. All methane, no oil observed. Splr: .112 CFG @ 30 psig, 900 cc wtr., 400 cc mud & LCM. Rm (splr)= 1.31 @ 61° F, 1360 ppm chl. CHl (mud pit) = 450 ppm. IHP 2641, IFP 95-293. FHP 2619. BHT 135° F.
Core #1:	5790-5801,	Pennslyvanian Sitton (A zone), cut 11, rec. 1' ls, hd, crpxln-mdst, w/crinoid columnals, sponge spicules, forams, small vert fracts. Tr. bl asphaltic stn., NOFC, sli tr. bldg gas fr Fracts - Lost 5791-5801.
Core #2:	5801-5818,	Pennsylcanian Sitton (A zone)-Boundary Butte Sh, Sut 17', rec. 15', Dolo, shly. No vis intergran porosity, NSOFC, Rare pelecypods. Lost 5816-18.
DST #2:	Attempted	5830-5968, Boundary Butte Sh-Lower Ismay. Misrun. Unable to reach bottom with tool. Hit bridge at 5648, 318' above bottom.
DST #3:	5830-5968,	Boundary Butte Sh-Lower Ismay. op. 17, SI 28, op.60, SI 150, IF op w/wk blow and rem. throughout. FF op w/weak blow and remained 1½" blow in bucket (weak) throughout. NGTS. Rec. 250' GCM. Splr. 0.24 CFG @ 54 psig, 900 cc mud. RmF(pit)= 3.46 @ 60°F, 455 ppm, RmF(splr) = 4.36 @ 58°F, 333 ppm, IHP 2705, IFP 114 to 137, ISIP 241, FFP 155-186, FSIP 357, FHP 2685. BHT 138°F.
Lost 50 bbls of mud at 6200'.		6214-6228:	700 un show of gas on hotwire.

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Morrison	246	Same
Summerville	980	
Entrada	1049	
Carmel	1202	
Navajo	1236	
Kayenta	1572	
Wingate	1784	
Chinle	2012	
Shinarump	2513	
Moenkopi	2601	
Cutler	2617	
Honaker Trail	4445	
Paradox	5029	
Sitton	5630	
Boundary Butte	5817	
Upper Ismay	5831	
Horenweep	5896	
Lower Ismay	5961	
Gothic Sh.	6009	
U. Desert Creek	6083	
L. Desert CrkS1	6135	
L. Desert CrkPy	6195	
Chimney Rock sh	6218	
Akah	6225	
Akah Salt	6263	

DST #4: 6204-6339, Pennsylvanian Lower Desert Creek - Akah Salt. op 15, SI 30, op. 62, SI 119. Op w weak blow, less than 1" in bucket. Rem. v. wk. throughout IF. NGTS. FF op w wk blow. Dead in 35 min. NGTS. Rec 75' mud. Splr: 2240 cc mud @ 38 psi. RmF (pit) 0.506 @ 53°F, 9000 ppm chl. RmF (btm. pipe) = 0.226 @ 56°F, 23000 ppm chl. RMF (splr) 0.369 @ 54°F, 12700 ppm chl. Top pressure chart: IHP 3015, IFP 41 to 41, ISIP 41-1783, FFP 48-61, FSIP 61-1660, FHP 3014. Btm pressure chart: IHP 3106, IFP 1689-1575, ISIP 1865, FFP 1600 to 1283, FSIP 1748, FHP 3104, BHT 154°F. Charts indicate severe plugging of anchor perforations during the flow periods.

TXP Operating Company
A Limited Partnership
Transco Exploration Company, Managing General Partner

2800 Post Oak Boulevard
P. O. Box 1396
Houston, Texas 77251
713-439-2000

February 25, 1985

Department of Natural Resources
Division of Oil, Gas, and Mining
355 West North Temple
Three Triad Center, Suite 350
Salt Lake City, Utah 84180-1203

Attention: John Baza

RE: TXP - Iron Springs #1-3
Wildcat Field
Section 3, T33S, R25E
San Juan County, Utah

Gentlemen:

Attached in triplicate is the Well Completion Report on the above referenced well. The open hole logs on this well have been submitted to you under separate cover.

If you require additional information, please contact me at (713) 439-3502.

Sincerely,

TXP OPERATING COMPANY
By Transco Exploration Company
its Managing General Partner

John Rosata, Jr. - Supervisor
Regulatory and Environmental Affairs

JRJ/CS/cs

Attachments

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
1A. TYPE OF WORK: DRILL ☐ REENTER ☒ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☒ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☒	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: CrownQuest Operating, LLC	9. WELL NAME and NUMBER: TXP - Iron Springs 1-3
3. ADDRESS OF OPERATOR: 303 Wall, Suite 1400, Midland Texas 79702 — PHONE NUMBER: (432) 685-3116	10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 265.97' FSL x 1726.86' FEL; AT PROPOSED PRODUCING ZONE: same	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Section 3, T33S, R25E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 14 miles northeast of Monticello	12. COUNTY: San Juan — 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 271'	16. NUMBER OF ACRES IN LEASE: to be determined — 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: N/A
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): N/A	19. PROPOSED DEPTH: 6340' — 20. BOND DESCRIPTION: RLB 0007554 ($120,000 Blanket)
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6768' GL	22. APPROXIMATE DATE WORK WILL START: March 25, 2006 — 23. ESTIMATED DURATION: 30 days

24. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD~ AND SLURRY WEIGHT
17 1/2"	13 3/8" drive pipe	100'	Installed and cemented in 1984
12 1/4"	9 5/8", 36 ppf, J55	2090'	Cemented to surface with 800 sks in 1984
To be set	after drilling out plugs		
8 1/2"	5 1/2", 17 ppf, P110	6340'	700 sks 65/35 poz, 1.75 cf/sk, 12.8 ppg followed by
			970 sks 'G' 1.16 cf/sk, 15.8 ppg

25. ATTACHMENTS

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☒ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☒ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Robert R. Griffee — 1/11/06 — TITLE Agent for CrownQuest Operating LLC

SIGNATURE _____ DATE _____

(This space for State use only)

API NUMBER ASSIGNED: 43-037-31106

APPROVAL:

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 02-28-06
By: _____

(110001)

(See Instructions on Reverse Side)

UTAH WELL LOCATION PLAT

OPERATOR Crown Quest Oil Management, LLC

LEASE Iron Spring WELL NO. 1-3

SECTION 3 TOWNSHIP 33 South RANGE 25 East 6th, P.M.

COUNTY San Juan UTAH

FOOTAGE LOCATION OF WELL: 265.97 FEET FROM THE South LINE and

1726.86 FEET FROM THE East LINE and

GROUND LEVEL ELEVATION: 6793.73

SURFACE USE WITHIN 200' RADIUS: No Improvements Within 200'

BASIS OF BEARING: GPS Data

BASIS OF ELEVATION: GPS Data – NAD 83

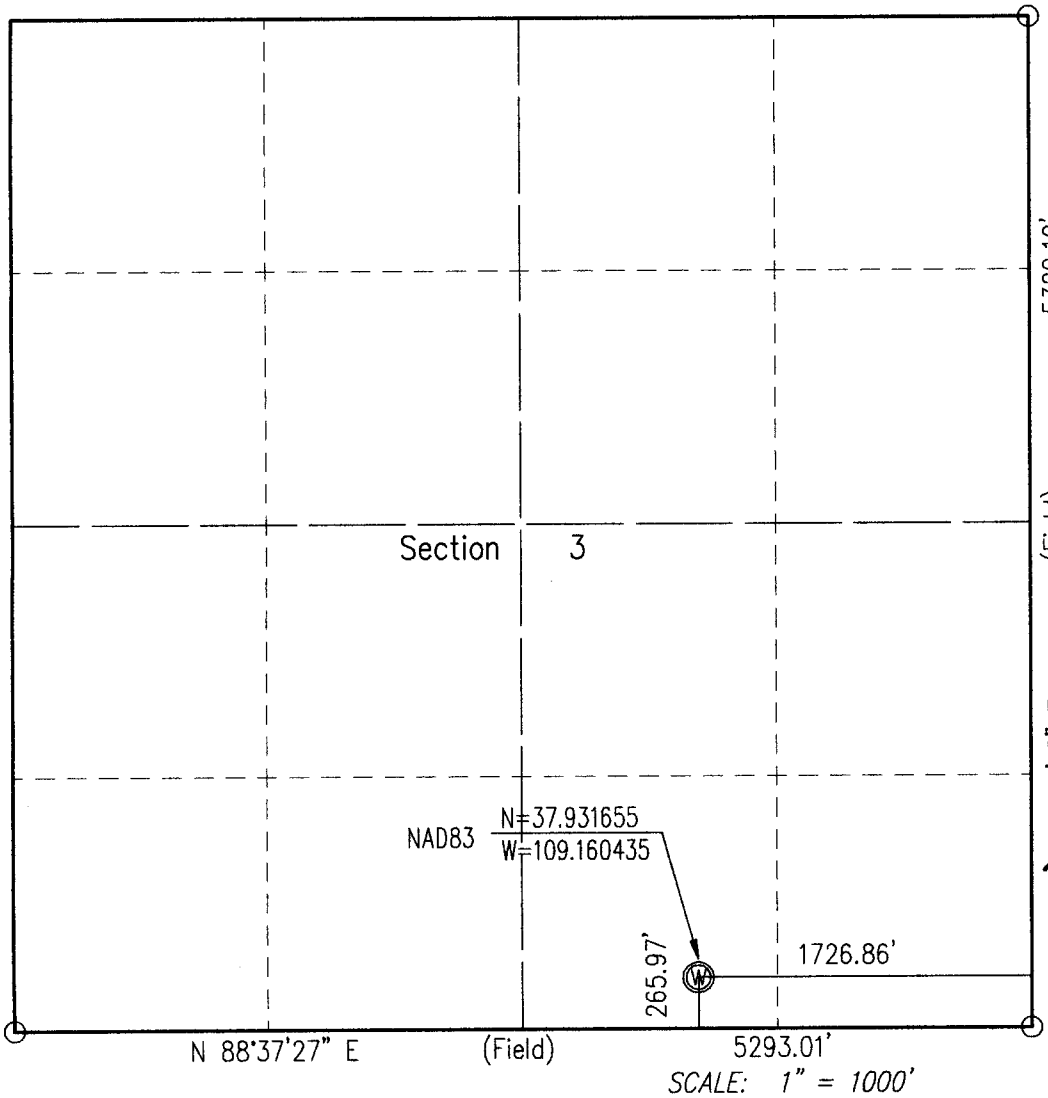
500' 500'

1" = 1000'

Some information on this plat is based on information taken from previous surveys, record information, or collatoral evidence and may not reflect that which may be disclosed by a complete boundary survey. This plat is not to be relied on for the establishment of surface boundaries, fences, buildings, or other future improvements.

○ Corner Post

Ⓦ WELL Location



SCALE: 1" = 1000'

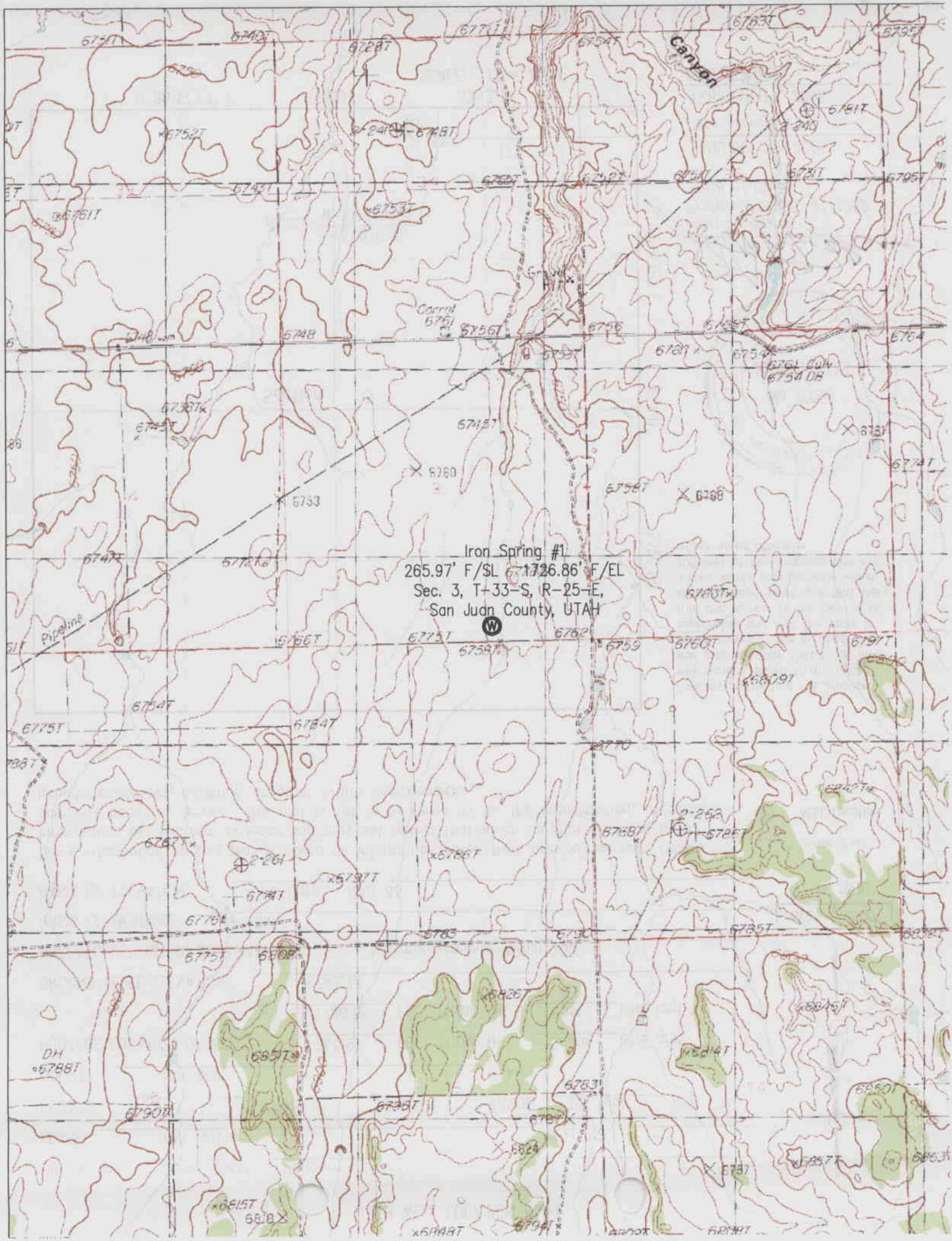
I hereby certify that the proposed well location shown on this plat was prepared from field notes of an actual survey by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief, and that there are no visible improvements within 200 feet of this proposed wellhead, unless noted otherwise.

LICENSED PROFESSIONAL SURVEYOR
No. 171252
JOHN D. WAYNE
STATE OF UTAH

John D. Wayne
Professional L.S. #171252
State of Utah

JANUARY 25, 2006
Date Surveyed:

FEBRUARY 1, 2006
Date Platted:


Canyon
Iron Spring #1
265.97' F/SL & 1726.86' F/EL
Sec. 3, T-33-S, R-25-E,
San Juan County, UTAH
Pipeline

Re-Entry Plan

Well Name: TXP – Iron Springs 1-3

API Number: 4303731106

Surface Location: 265.97' FSL x 1726.86' FEL, Section 3, T33S, R25E
San Juan County, Utah

Target Formation: Pennsylvanian

Elevation: 6768' GL

Geology:

Formation	Top	Probable Content
Soil	Surface	
Dakota	10'	sandstone; possible water
Morrison	246'	intbdd sh/ss
Summerville/Wanakah	980'	red sh/sltst
Entrada Ss	1050'	potential fresh water
Carmel Fm	1202'	red sh/sltst
Navajo Ss	1236'	potential fresh water
Kayenta Fm	1572'	red ss
Wingate Ss	1784'	potential fresh water
Chinle Fm	2012'	vari-color shale
Shinarump Ss	2513'	gas/water
Moenkopi Fm	2600'	brn-red sltst/sh
Cutler (top of Permian)	2617'	prpl crs ss/sh; potential fresh water
Honaker Trail (top of Penn)	4470'	ls; potential gas, brine
Upper Ismay	5832'	gas/oil/brine
Lower Ismay	5960'	gas/oil/brine
Gothic Shale	6008'	blk sh
Desert Creek	6082'	gas/oil/brine
Desert Creek salt	6138'	salt
Akah	6226'	gas/oil/brine
Akah Salt	6264'	salt
TD	6340'	

Logging Program: Open hole logs have already been obtained and submitted. Cased hole neutron log to be run after setting 5 ½" casing.

Date: 1-12-06

To Whom It May Concern:

CrownQuest Operating, LLC, of Midland, Texas is submitting the enclosed APPLICATION FOR PERMIT TO DRILL (REENTER). The engineering, permitting, subsequent work and production supervision is being directed by Robert R Griffee,Agent for CrownQuest Operating, LLC. In the event the State of Utah has questions or directives which need to be addressed, Mr Griffee may be contacted at:

Robert R. Griffee
Roddy Production Company, Inc.
P.O.Box 2221 * 2600 Farmington Ave.
Farmington, New Mexico 87499
Ph: (505) 326-6813
Email: bgriffeerpc@qwest.net

Donal W. Key, Land, Permitting, and Construction Agent, may also be contacted with regard to permitting and location construction issues at:

Donal W. Key
Ph: (505) 716-2543
Email: donalkey@msn.com

Signature: _____ Date: 1/16/06
Robert R. Griffee, Agent for CrownQuest Operating, LLC

TXP - Iron Springs #1-3

APD Checklist

The APD shall include (please attach two copies if for State or Fee surface):

Priority

1. ✓ A completed and signed Form 3 (application to drill, deepen or reenter). Make sure all blanks are filled and boxes are checked.
2. ✓ Contact information and phone number for surface owner.
3. ✓ Location plat.
4. NA Water Rights approval.
5. ✓ Estimated geologic markers.
6. ✓ Estimated top and bottom of anticipated water, oil, gas, other mineral zones and plans for their protection.
7. ✓ Plan for pressure control (BOPE), including schematic and casing test.
8. ✓ Description of mud system, including mud weights.
9. ✓ Plans for testing, logging and coring.
10. ✓ Expected bottom hole pressure, any anticipated abnormal pressures, temperatures, or hazards and plans for mitigation of them.
11. ✓ Casing design (size, type, weight).
12. ✓ Cement design (type, weight, yield, estimated top, # sacks).
13. NA Diagram of horizontal or directional well bore path including directional survey plan.
14. ✓NA Designation of agent if necessary.
15. ✓ Bond. on file with ~~BLM~~ State
16. ✓ Affidavit of Surface agreement.
17. NA Exception location application (if needed).

An application for directional drilling shall also include:

18. NA Plat showing surface location, section and lease lines, target location, points along the well bore where owner consent has been obtained.
19. NA Reason for deviation.

(2/8/2005)

RECEIVED

FEB 0 6 2006

DIV. OF OIL, GAS & MINING

DIVISION OF OIL, GAS AND MINING
APPLICATION FOR PERMIT TO DRILL
STATEMENT OF BASIS

OPERATOR: CrownQuest Operating, LLC
WELL NAME & NUMBER: TXP-Iron Springs 1-3
API NUMBER: 43-037-31106
LOCATION: 1/4,1/4 SW,SE Sec: 3 TWP: 33 S RNG: 25 E 271'FSL 1714'FEL

Geology/Ground Water:

This is a reentry of an existing well. There should be no adverse effects to ground water resources.

Reviewer: Brad Hill **Date:** 02/13/06

Surface:

Presite 02/13/06 12:15 P.M. Bruce Adams (Landowner), Donal Key (Keyco), Ted Smith (DOGM), Bart Kettle (DOGM). In 1984 a well was drilled and PA'd on this location. Operator wishes to reenter the existing drill pipe. Landowner and DWR have an agreement not to disturb the Gunnison Sage Grouse habitat located on and around this site between 3/20 and 5/20 each year. Operator plans to reenter the PA'd well before this date and if production proves favorable will return after the DWR nesting date expires. The operator should conduct no work during the critical nesting period of the Gunnison sage grouse while this agreement between landowner and DWR is in force.

Reviewer: Ted Smith **Date:** 02/13/2006

Conditions of Approval/Application for Permit to Drill:

None.

ON-SITE PREDRILL EVALUATION
Division of Oil, Gas and Mining

OPERATOR: CrownQuest Operating, LLC
WELL NAME & NUMBER: TXP-Iron Springs 1-3
API NUMBER: 43-037-31106
LEASE: Fee **FIELD/UNIT:** Wildcat
LOCATION: 1/4,1/4 SW,SE **Sec:** 3 **TWP:** 33S **RNG:** 25E 271'FSL 1714'FEL
LEGAL WELL SITING: F **SEC. LINE;** F **1/4,1/4 LINE;** F **ANOTHER WELL.**
GPS COORD (UTM): X =661,724 E; Y =4,199,624 N **SURFACE OWNER:** Lynn Adams

PARTICIPANTS

Bruce Adams (Landowner), Donal Key (Keyco), Ted Smith(DOGM), Bart Kettle (DOGM)

REGIONAL/LOCAL SETTING & TOPOGRAPHY

Flat natural grasses only dry farming to the South and West

SURFACE USE PLAN

CURRENT SURFACE USE: Natural Grass, Surface owner has agreement with DWR concerning the Gunnison Sage Grouse active area

PROPOSED SURFACE DISTURBANCE: Reroute of access road to maintain good distance from Gunnison Sage Grouse. New access will be located 0.9 mile South along fence line and 0.15 East along fence line.

LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS: None observed at onsite.

LOCATION OF PRODUCTION FACILITIES AND PIPELINES: Gas Pipeline 0.9 mile NW from location.

SOURCE OF CONSTRUCTION MATERIAL: At time of drilling no construction material will be needed or imported.

ANCILLARY FACILITIES: N/A

WILL DRILLING AT THIS LOCATION GENERATE PUBLIC INTEREST OR CONCERNS? (EXPLAIN): The surrounding area has no production. If well proves to be productive then the local public will be interested in a positive manner.

WASTE MANAGEMENT PLAN:

Drill crew will be housed in Monticello. Portable toilets will be onsite. Solid waste such as everyday trash will be transported by wire covered dumpster to county landfill. Fresh water will be obtained and transported by water truck from Monticello. Drilling fluids will be left in the pit for evaporation. If any unacceptable drilling fluids are created during the drilling process they will be hauled by truck to the Montezuma Creek disposal facility.

ENVIRONMENTAL PARAMETERS

AFFECTED FLOODPLAINS AND/OR WETLANDS: None observed at onsite

FLORA/FAUNA: Winter Flat, Black Sage, Green Stem Rubber Rabbit Brush, Crested Wheat, And Russian Knapweed

SOIL TYPE AND CHARACTERISTICS: Alluvium, light brown in color, small amount of sand, and very slick and muddy when wet.

SURFACE FORMATION & CHARACTERISTICS: Dakota

EROSION/SEDIMENTATION/STABILITY: Flat and stable ground very small wash to the east of drill pad

PALEONTOLOGICAL POTENTIAL: None observed at onsite.

RESERVE PIT

CHARACTERISTICS: 55'x80'

LINER REQUIREMENTS (Site Ranking Form attached): 15

SURFACE RESTORATION/RECLAMATION PLAN

Within one year of plugging well as per landowner agreement.

SURFACE AGREEMENT: Dated January 31,2006

CULTURAL RESOURCES/ARCHAEOLOGY: Wells location is in a rich cultural resource area. None were observed.

OTHER OBSERVATIONS/COMMENTS

The Adams family has an easement agreement in place with the DWR on 2,200 acres of land to be used for the Gunnison Sage Grouse nesting area. This agreement has a year time frame (3/20-5/20) of no grazing or other activity. Access onto the drill site will be 0.9 miles along the Western most North South fence line and turning East 0.15 mile along the East West fence line. An earthen manmade dam is visible 1320' from drill site.

ATTACHMENTS

Photos of this location were taken and placed on file.

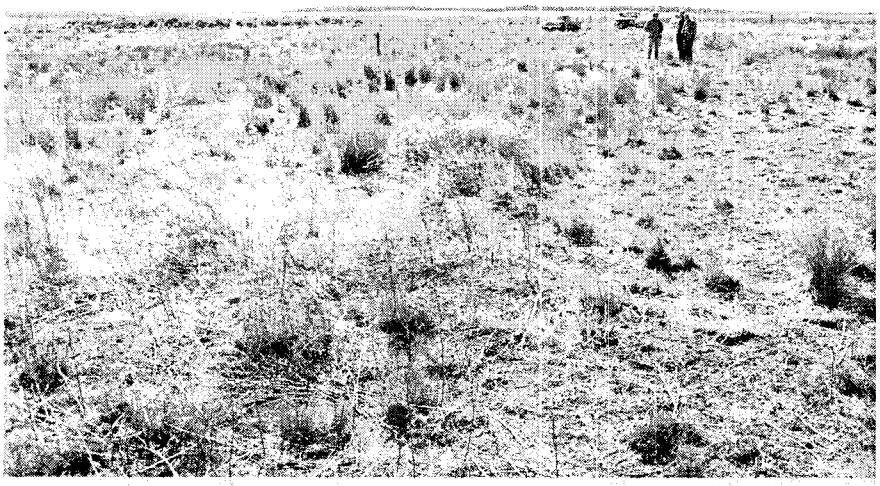
Ted Smith, Bart Kettle	February 13, 2006/ 12:15P.M
DOGM REPRESENTATIVE	DATE/TIME

Evaluation Ranking Criteria and Ranking Score
For Reserve and Onsite Pit Liner Requirements

Site-Specific Factors	Ranking	Site Ranking
Distance to Groundwater (feet)		
>200	0	
100 to 200	5	
75 to 100	10	
25 to 75	15	
<25 or recharge area	20	0
Distance to Surf. Water (feet)		
>1000	0	
300 to 1000	2	
200 to 300	10	
100 to 200	15	
< 100	20	0
Distance to Nearest Municipal Well (feet)		
>5280	0	
1320 to 5280	5	
500 to 1320	10	
<500	20	0
Distance to Other Wells (feet)		
>1320	0	
300 to 1320	10	
<300	20	0
Native Soil Type		
Low permeability	0	
Mod. permeability	10	
High permeability	20	5
Fluid Type		
Air/mist	0	
Fresh Water	5	
TDS >5000 and <10000	10	
TDS >10000 or Oil Base Mud Fluid containing significant levels of hazardous constituents	20	5
Drill Cuttings		
Normal Rock	0	
Salt or detrimental	10	0
Annual Precipitation (inches)		
<10	0	
10 to 20	5	
>20	10	5
Affected Populations		
<10	0	
10 to 30	6	
30 to 50	8	
>50	10	0
Presence of Nearby Utility Conduits		
Not Present	0	
Unknown	10	
Present	15	0

Final Score 15 (Level II Sensitivity)

Sensitivity Level I = 20 or more; total containment is required, consider criteria for excluding pit use.
Sensitivity Level II = 15-19; lining is discretionary.
Sensitivity Level III = below 15; no specific lining is required.



Re-Entry Plan

Well Name: TXP – Iron Springs 1-3

API Number: 4303731106

Surface Location: 265.97' FSL x 1726.86' FEL, Section 3, T33S, R25E
San Juan County, Utah

Target Formation: Pennsylvanian

Elevation: 6768' GL

Geology:

Formation	Top	Probable Content
Soil	Surface	
Dakota	10'	sandstone; possible water
Morrison	246'	intbdd sh/ss
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Navajo Ss	1236'	potential fresh water
Kayenta Fm	1572'	red ss
Wingate Ss	1784'	potential fresh water
Chinle Fm	2012'	vari-color shale
Shinarump Ss	2513'	gas/water
Moenkopi Fm	2600'	brn-red sltst/sh
Cutler (top of Permian)	2617'	prpl crs ss/sh; potential fresh water
Honaker Trail (top of Penn)	4470'	ls; potential gas, brine
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Gothic Shale	6008'	blk sh
Desert Creek	6082'	gas/oil/brine
Desert Creek salt	6138'	salt
Akah	6226'	gas/oil/brine
Akah Salt	6264'	salt
TD	6340'	

Logging Program: Open hole logs have already been obtained and submitted. Cased hole neutron log to be run after setting 5 ½" casing.

Clean-out Fluid Program:

Interval	Fluid Type	Weight	Viscosity	Fluid Loss
0' – 2090'	fresh water	8.4 ppg	n/a	no control
2090' – 6340'	production brine/polymer	9.2 ppg	30 – 80 sec	10

Casing Program:

Interval	Hole Diameter	Csg Size	Wt.	Grade	Thread
Conductor – Installed 1984					
0' – 100'	17 1/2"	13 3/8"	drive pipe		
Surface – Installed 1984					
0' – 2162'	12 1/4"	9 5/8"	36 ppf	J-55	STC
Production					
0' – 6261'	8 1/2"	5 1/2"	17 ppf	P110	LTC

Tubing Program: 0 – 6000', 2 7/8", 6.5 ppf, J55, EUE

BOPE and Wellhead Specifications and Testing:

For clean-out operations from surface to TD: 9 5/8", 3000 psi weld on casing head (already installed). 9 5/8", 3000 psi double gate BOP and 3000 psi annular preventor. 3000 psi choke manifold. (see figures 1 and 2). Pressure test BOPE to 3000 psi and 9 5/8" Surface casing to 1500 psi prior to drilling out of casing shoe.

For completion operations: 5 1/2" x 2 3/8", 5000 psi tree assembly. 7 1/16", 5000 psi double gate BOP system. 5000 psi choke manifold (see figures 3 and 4). Pressure test 5 ½" casing to 5000 psi prior to frac'ing. The 5000 psi pressure rating is for possible frac treatment pressures and is far in excess of 3000 psi BOP equipment required to control anticipated formation pressure.

General Operation:

- Actuate pipe rams once each day during clean-out operations. Actuate blind rams once each trip.
- An upper Kelly cock valve, with handle, will be available on the rig floor to fit each drilling string.
- BOP pit level drill will be conducted weekly for each drilling crew.
- All BOP tests and drills will be recorded in the daily drilling report.
- Blind and pipe rams will be equipped with extension hand wheels.

Cementing Program:

13 3/8" Conductor Casing String: already installed and cemented.

9 5/8" Surface Casing String: already installed and cemented.

5 ½" Production Casing String: Run casing with float shoe on bottom, float collar one joint from bottom. Install one centralizer in the middle of the first joint, one on every other collar from TD to the top of the Honaker Trail formation, and one inside the surface casing shoe Cement with 700 sks 65/35 poz + 6% gel + 5#/sk gilsonite + ¼# sk celloflake + fluid loss additive (1.75 cf/sk, 12.8 ppg) followed by 970 sks class 'G' neat + fluid loss additives (1.16 cf/sk, 15.8 ppg). Precise slurry volumes to be calculated from open hole log caliper plug 25% excess. Top of cement calculated to be at 1662'.

Special Clean-out Operations:

None anticipated

Additional Information:

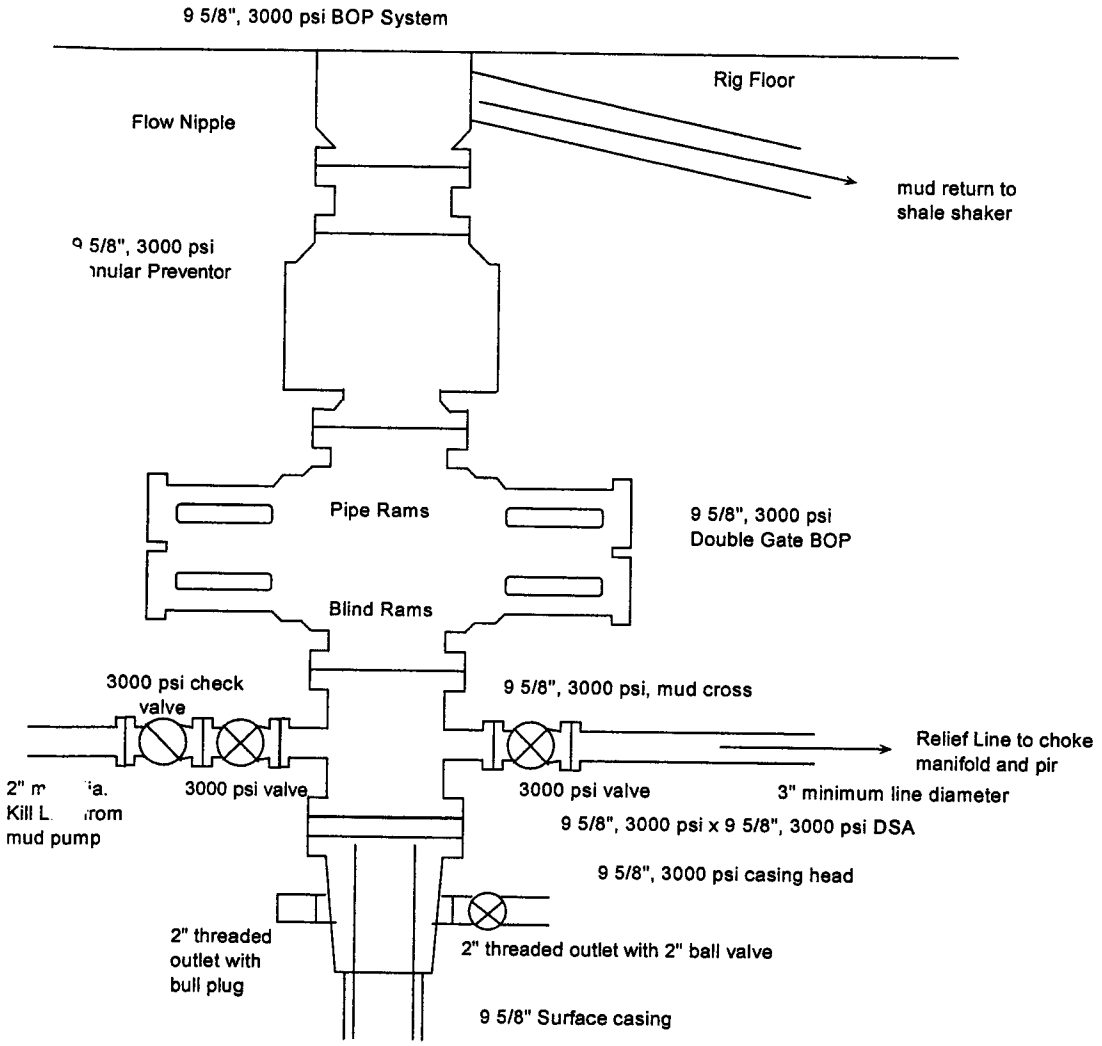
- This well is designed to be completed in the Pennsylvanian formations, based on cased-hole logs.
- A fresh water pressure gradient (.433 psi/ft) is anticipated. Adequate weighting material will be kept on location to maintain mud weight.
- LCM will be added to the mud system as required to maintain circulation.
- Estimated formation pressures:
  - Ismay 2540 psi
  - Desert Creek 2590 psi

Completion Information:

The completion procedure will be prepared after cased hole logs are analyzed. The well will probably be completed by frac treatment.

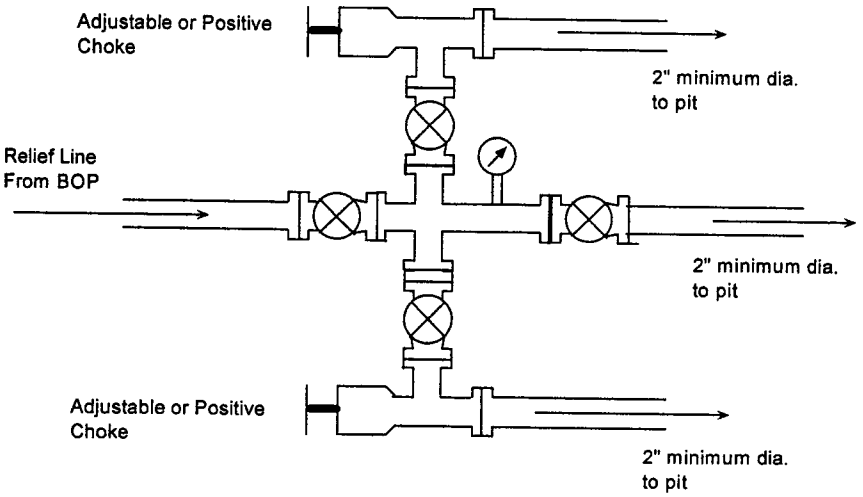
Prepared by: Robert R. Griffee
Operations Manager
Agent for CrownQuest
Date: 1/11/06

Figure 1



BOP Installation from Surface Casing depth (2200') to TD (6060'). 9 5/8", 3000 psi double gate BOP equipped with blind and pipe rams, 9 5/8" Annular BOP. All equipment rated at 3000 psi or greater working pressure.

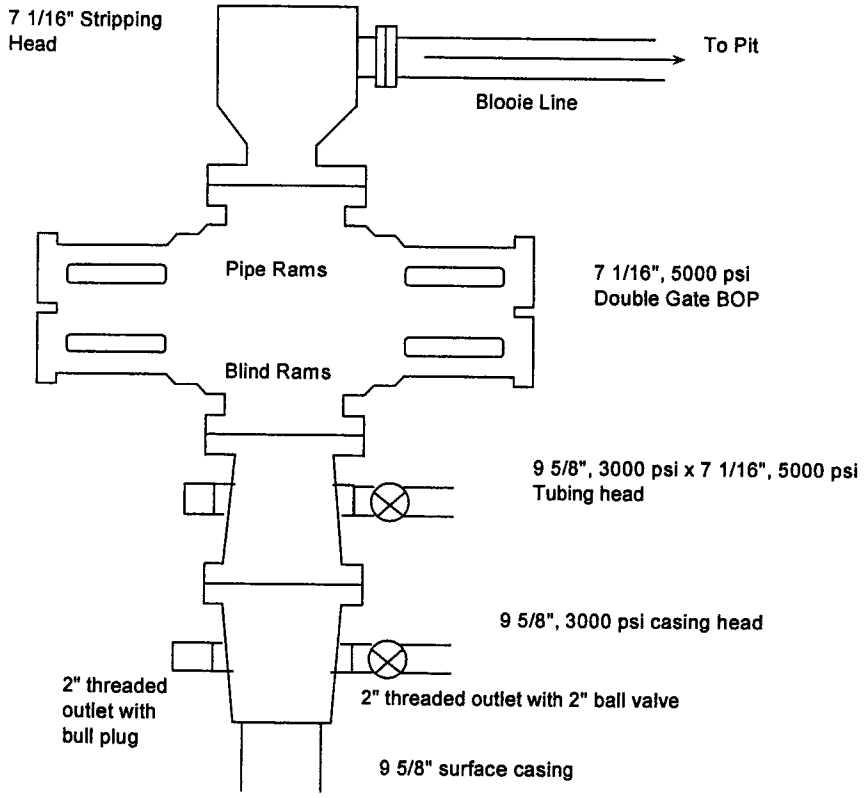
Figure 2



Choke manifold for BOP system shown in Figure 3.
All equipment to be rated at 3000 psi or greater.

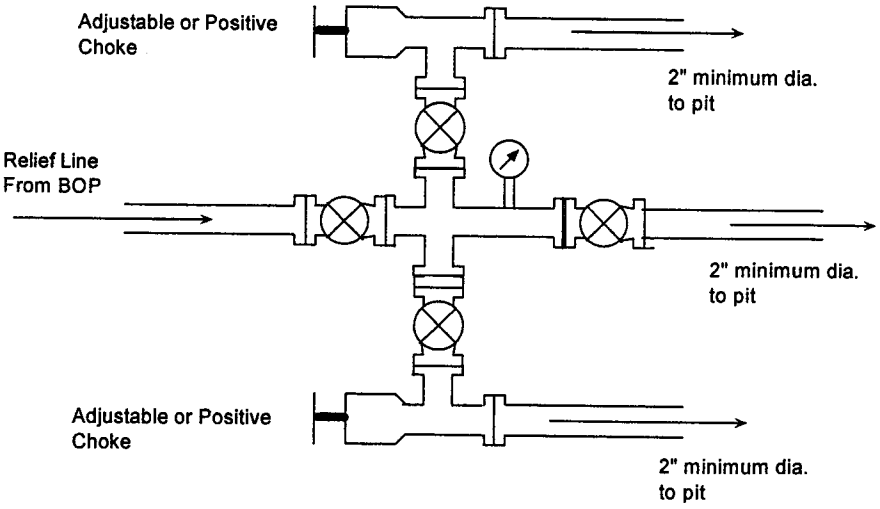
Figure 3

7 1/16", 5000 psi Completion Rig BOP System



BOP Installation for Completion operations. 7 1/16", 5000 psi double gate BOP equipped with blind and pipe rams. All equipment rated at 5000 psi or greater working pressure.

Figure 4



Choke manifold for BOP system shown in Figure 5. All equipment to be rated at 5000 psi or greater.

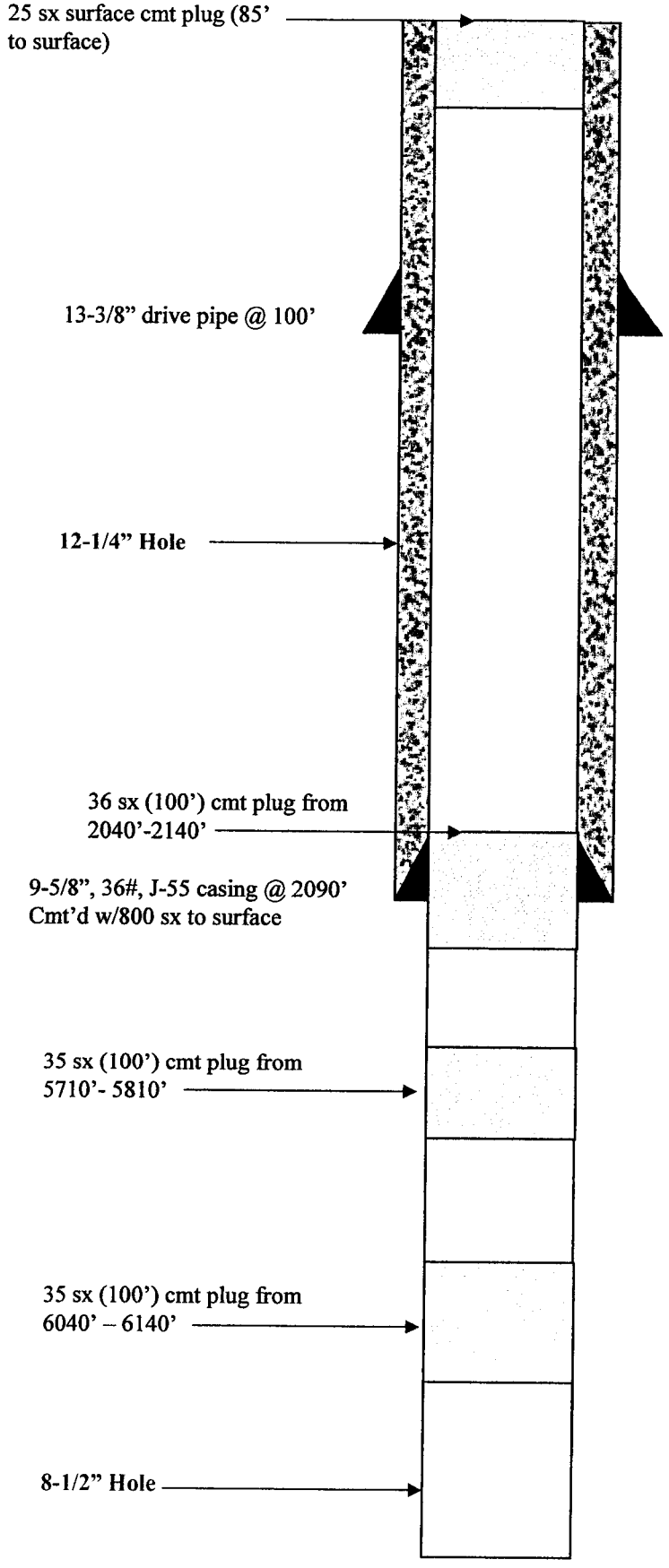
SPUD DATE: 12/1/1984 El ion: 6782' KB, 6768' GL

TX1 – IRON SPRINGS #1-3

271' FSL, 1714' FEL, Sec. 3, T33S, R25E,

San Juan County, Utah, API #43-037-31106

Well was drilled by Transco Exploration Co. of Houston, TX



TD: 6340' on 12/16/84

Prepared by: BKL, 12/05

TXP – Iron Springs #1-3
Re-Entry and Testing/Completion Procedure

Prepared by: Blain Lewis
Senior Engineer
1/6/06

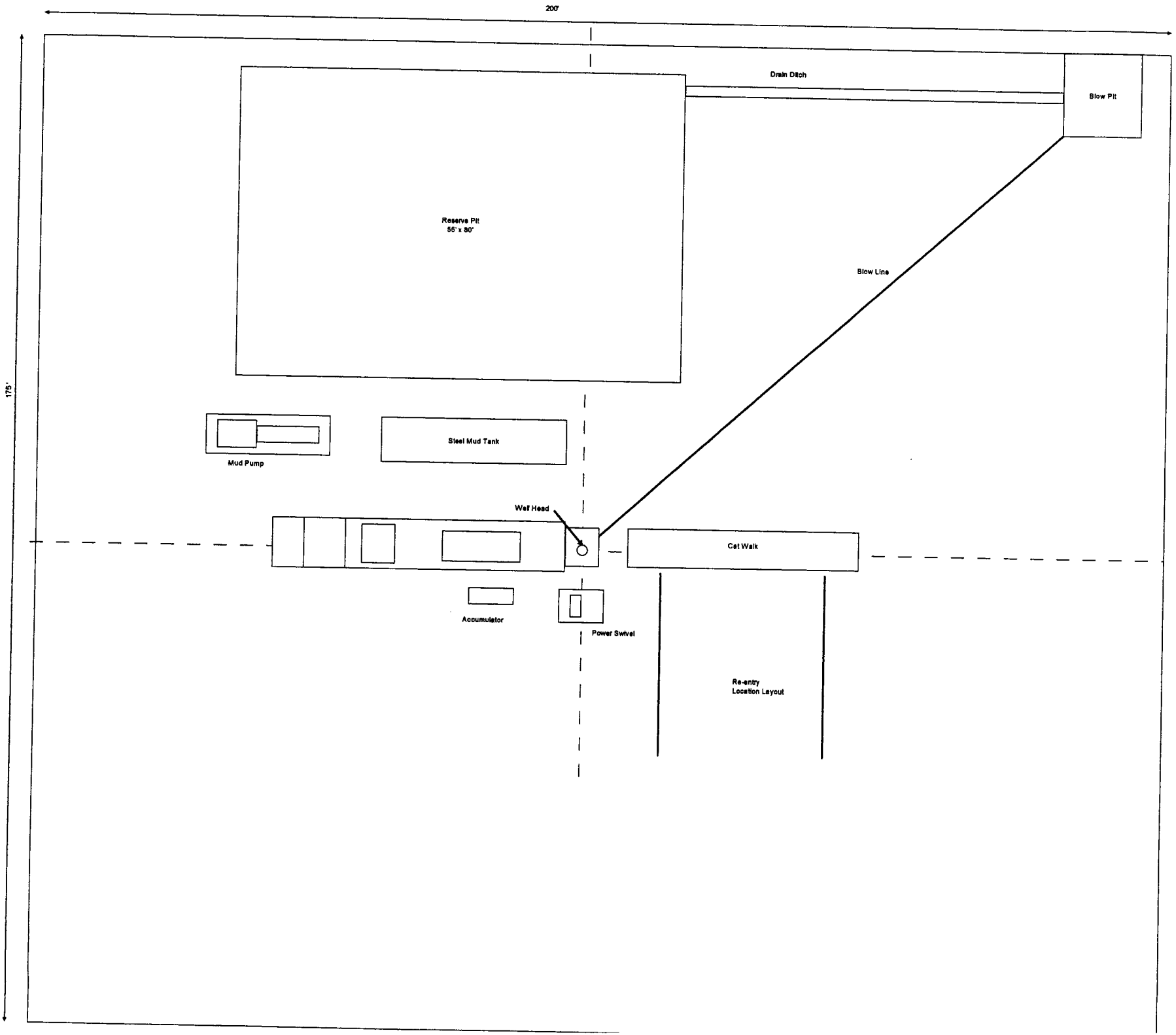
Notes:

- The API number is 43-037-31106.
- This well was P&A'd as a dry hole in 1984 by Transco Exploration Co.
- TD was 6340'.
- 3000-psi BOP equipment is selected to drill out the cement plugs. The expected maximum formation pressure is 2980 psi at 6340 ft, or a pressure gradient of 0.47 psi/ft.
- 5000-psi BOP equipment is selected for completion work based on possible flow back pressures after acidizing or hydraulic fracture treatments and not from expected formation pressure.
- Surface casing is set at 2090'. 9-5/8", 36 ppf, J55. YP = 3520 psi. Cemented with 800 sks to surface.

Procedure:

1. Locate wellbore and NU casinghead.
2. MIRU well service rig and equipment.
3. NU 9-5/8", 3000-psi BOPE.
4. PU 8-1/2" mill tooth bit, eight 4-¾" dc's, and 2-7/8" work string. Drill out cement plugs from surface to 85'. Clean out to cement plug at 2040'.
5. TOH.
6. Install test plug in casing head and pressure test casinghead and BOPE to 3000 psi for 10 minutes.
7. Pressure test casing to 2500 psi for 10 minutes.
8. TIH with bit and dc's and drill cement plugs from 2040' – 2140', 5710' – 5810' and 6040' – 6140'. Use 9.2 ppg production brine for circulating fluid from the surface casing shoe to TD. Add polymer as needed for viscosity and water-loss control.
9. Circulate well clean and stabilize wellbore.
10. TOH.
11. RU and run 5-½", 17 ppf, P-110, LT&C casing. Install float shoe on bottom and float collar one joint from bottom. Centralize with 1 centralizer per casing collar from TD to 5500', and one centralizer at 2140' (inside surface casing). Land casing in full tension.
12. Cement as follows: 680 sks 65/35 poz + 6% gel + 5#/sk D24 + 0.5% D112 + 0.25 #/sk celloflake followed by 970 sks class 'G' + 0.25% D167 FL + 0.2% D65 + 0.2% D20. Slurry volumes designed to bring cement 500' up into 9-5/8" casing. 25% excess over open hole volume.

13. WOC 48 hours or as indicated by pilot testing, for cement to achieve full compressive strength.
14. While WOC, ND 9-5/8", 3000-psi BOP. NU 9-5/8", 3000-psi x 7-1/16", 5000-psi casinghead. NU 7-1/16", 5000-psi BOP.
15. Pressure test casing and BOP to 5000 psi for 10 minutes.
16. PU bit. TIH and clean out to PBTD of 6300' +/-. Circulate casing clean. TOH.
17. TIH to PBTD with casing scraper.
18. Load casing with 4% KCl water. Insure that all additional load water is 4% KCl.
19. TOH.
20. Run cased-hole logs and evaluate.
21. Select completion interval based on cased-hole logs. Completion may be accomplished by acidizing and/or frac (to be determined). Potential completion possibilities are of Pennsylvanian age from 6225' (top of Akah salt) to 5817' (top of upper Ismay).
22. After completing, evaluate zones and put well on production.


200'
175'
Drain Ditch
Blow Pit
Reserve Pit
55' x 80'
Blow Line
Steel Mud Tank
Mud Pump
Well Head
Cat Walk
Accumulator
Power Swivel
Re-entry
Location Layout

INFORMATION CONTACT SHEET
TXP-Iron Springs 1-3
Section 3, T33S, R25E
San Juan County, Utah

Surface and Mineral Owner:

Mr. Lynn Adams
P.O. Box 932
1335 Clayhill Rd.
Monticello, Utah 84535
Ph: 435-587-2415

AFFIDAVIT OF SURFACE AGREEMENT

I, Robert W. Floyd, President of CrownQuest Operating, LLC, does acknowledge and agrees that a surface agreement exists or will exist prior to beginning construction activities on the proposed re-entry sight of the:

Jefferson State 4-1 Well, San Juan County, Utah

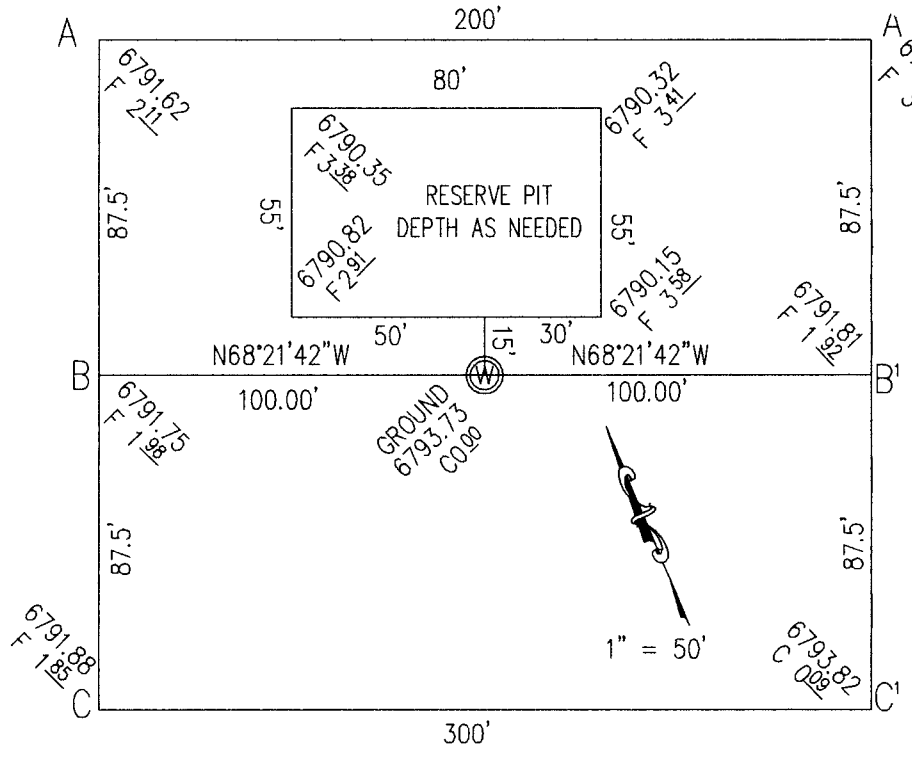
S.P. Meyer Well, San Juan County, Utah

TXP Iron Springs 1-3 Well, San Juan County, Utah

Subscribed and sworn before me this 19th day of January, 2006.

CROWNQUEST OPERATING, LLC

Robert W. Floyd, President



Bridwell Oil Management, LLC
OPERATOR

Iron Spring #1-3
WELL NAME and NUMBER

265.97' F/SL 1726.86' F/EL
FOOTAGES

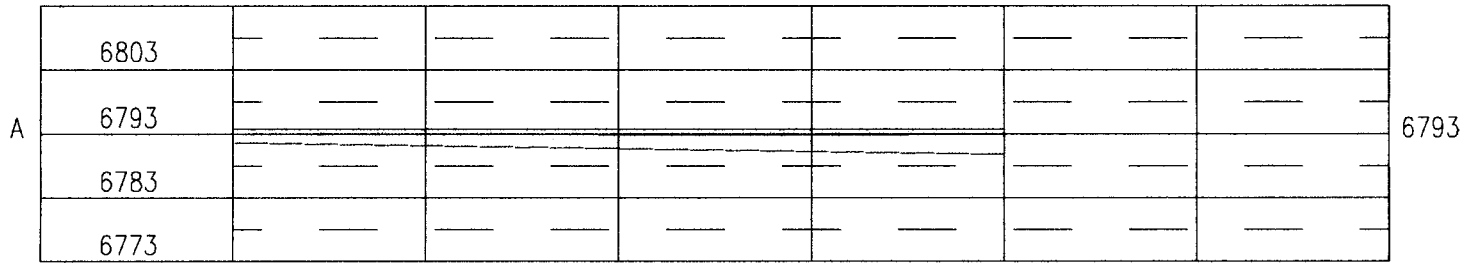
3	33S	25E
SEC.	TWP.	RGE.

San Juan, Utah
COUNTY STATE

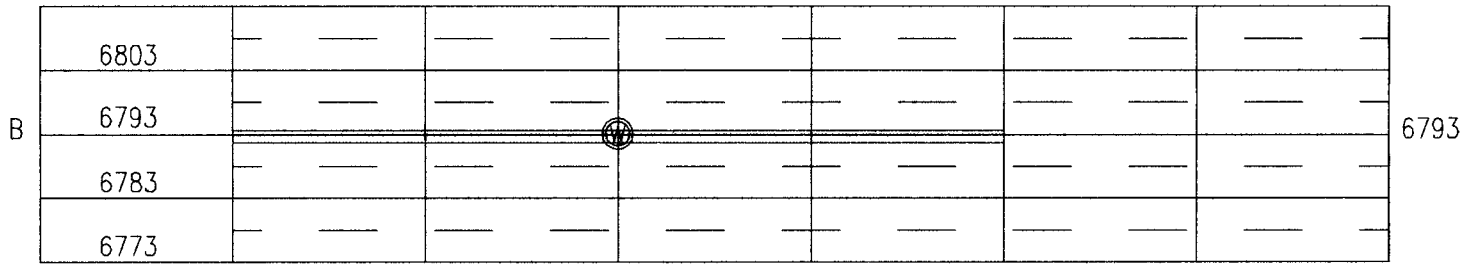
January 25, 2006
DATE

SCALE
Horiz. 1" = 50'
Vert. 1" = 30'

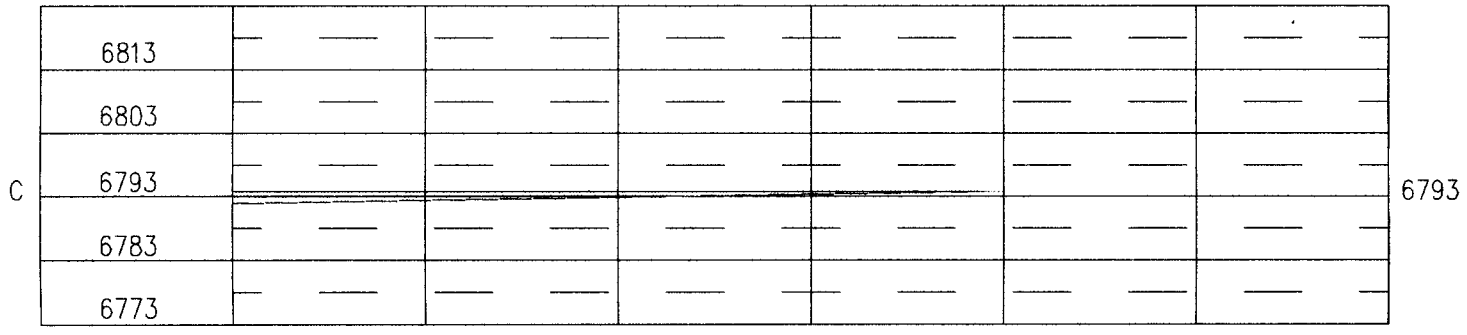
A – A'



B – B'



C – C'



STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT ☐
(highlight changes)

APPLICATION FOR PERMIT TO DRILL

5. MINERAL LEASE NO: Fee	6. SURFACE: Fee
1A. TYPE OF WORK: DRILL ☐ REENTER ☒ DEEPEN ☐	7. IF INDIAN, ALLOTTEE OR TRIBE NAME:
B. TYPE OF WELL: OIL ☐ GAS ☒ OTHER _____ SINGLE ZONE ☐ MULTIPLE ZONE ☒	8. UNIT or CA AGREEMENT NAME:
2. NAME OF OPERATOR: CrownQuest Operating, LLC	9. WELL NAME and NUMBER: TXP - Iron Springs 1-3
3. ADDRESS OF OPERATOR: 303 Wall, Suite 1400, Midland Texas 79702 — PHONE NUMBER: (432) 685-3116	10. FIELD AND POOL, OR WILDCAT: Wildcat
4. LOCATION OF WELL (FOOTAGES) AT SURFACE: 265.97' FSL x 1726.86' FEL 661714X 37.931715 AT PROPOSED PRODUCING ZONE: same 4199630X -109.159931	11. QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Section 3, T33S, R25E
14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE: 14 miles northeast of Monticello	12. COUNTY: San Juan — 13. STATE: UTAH
15. DISTANCE TO NEAREST PROPERTY OR LEASE LINE (FEET): 271'	16. NUMBER OF ACRES IN LEASE: to be determined — 17. NUMBER OF ACRES ASSIGNED TO THIS WELL: N/A
18. DISTANCE TO NEAREST WELL (DRILLING, COMPLETED, OR APPLIED FOR) ON THIS LEASE (FEET): N/A	19. PROPOSED DEPTH: 6340' — 20. BOND DESCRIPTION: RLB 0007554 ($120,000 Blanket)
21. ELEVATIONS (SHOW WHETHER DF, RT, GR, ETC.): 6768' GL	22. APPROXIMATE DATE WORK WILL START: March 25, 2006 — 23. ESTIMATED DURATION: 30 days

24. **PROPOSED CASING AND CEMENTING PROGRAM**

SIZE OF HOLE	CASING SIZE, GRADE, AND WEIGHT PER FOOT	SETTING DEPTH	CEMENT TYPE, QUANTITY, YIELD- AND SLURRY WEIGHT
17 1/2"	13 3/8" drive pipe	100'	Installed and cemented in 1984
12 1/4"	9 5/8", 36 ppf, J55	2090'	Cemented to surface with 800 sks in 1984
To be set	after drilling out plugs		
8 1/2"	5 1/2", 17 ppf, P110	6340'	700 sks 65/35 poz, 1.75 cf/sk, 12.8 ppg followed by
			970 sks 'G' 1.16 cf/sk, 15.8 ppg

25. **ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES:

- ☒ WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER
- ☐ EVIDENCE OF DIVISION OF WATER RIGHTS APPROVAL FOR USE OF WATER
- ☒ COMPLETE DRILLING PLAN
- ☐ FORM 5, IF OPERATOR IS PERSON OR COMPANY OTHER THAN THE LEASE OWNER

NAME (PLEASE PRINT) Robert R. Griffee 1/11/06 TITLE Agent for CrownQuest Operating LLC

SIGNATURE _____ DATE _____

(This space for State use only)

API NUMBER ASSIGNED: 43-037-31106 APPROVAL:

(110001) (See Instructions on Reverse Side)

FEB 14 2006

CROWNQUEST
CROWNQUEST OPERATING, LLC

API 43-037-311.

January 31, 2006

Mr. Lynn Adams, Trustee
Lynn L. and Reta L. Adams Family
Trust dated 10/30/82
P.O. Box 932
Monticello, UT 84535

Re: Iron Springs #1-3 well
Section 3, T-33-S, R-25-E
San Juan County, Utah

Dear Mr. Adams:

This letter, when accepted by you will confirm the agreement between yourself and CrownQuest Operating, LLC ("CrownQuest") concerning the use of the above captioned surface for drilling purposes under the following terms:

1. CrownQuest will pay you $1,500.00 per acre as surface damages for roads and drilling pads.

2. CrownQuest will pay $7.50 per rod for any pipeline laid that is not within the road right of way. All pipelines will be buried a minimum of 3 feet below the surface.

3. In the event CrownQuest drills a water well on the lands, you shall have the right to takeover said well after CrownQuest has discontinued its use at your sole cost and expense. It is understood however, that in the event you takeover the well, CrownQuest shall have the continuing right to use the well from time to time for its drilling and/or production operations for the life of the water well.

See Next Page for Revision

4. CrownQuest agrees, upon completion of any operation, to clean up the premises and remove all debris and equipment which CrownQuest has placed on the lands except for equipment needed for the operation of producing wells, which shall be removed within six (6) months after a well permanently ceases to produce.

Please signify your acceptance of this agreement by signing in the space provided below and returning a copy of this letter agreement.

RECEIVED
FEB 14 2006
DIV OF OIL, GAS & MINING

Very truly yours,

M. Craig Clark

AGREED TO AND ACCEPTED
this 10 day of February, 2006.

Lynn L. Adams

Lynn L. Adams, Trustee of the Lynn L.
and Reta L. Adams Family Trust
Dated October 30, 1982.

3. In the event CrownQuest drills a water well on this land, you will have the right to water livestock from this well, and will have the right to use this well after CrownQuest has discontinued its use, It is understood however that in the event you takeover the well CrownQuest will have the right to continue to use the well for drilling and/or production on other wells in this area providing Adams Minerals Co own the Mineral right and this provision will expire on May 1, 2011

Well name:	**02-06 Crownquest TXP-Iron Springs 1-3**
Operator:	**Crownquest Operating, LLC**
String type:	Surface
Project ID:	43-037-31106
Location:	San Juan County

Design parameters:

Collapse
Mud weight: 8.400 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 1,839 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 2,090 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 1,830 ft

Environment:
H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 94 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 250 ft

Cement top: Surface

Non-directional string.

Re subsequent strings:
Next setting depth: 6,340 ft
Next mud weight: 9.200 ppg
Next setting BHP: 3,030 psi
Fracture mud wt: 19.250 ppg
Fracture depth: 2,090 ft
Injection pressure 2,090 psi

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	2090	9.625	36.00	J-55	ST&C	2090	2090	8.796	148.8

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	912	2020	2.215	2090	3520	1.68	66	394	5.98 J

Prepared by: Clinton Dworshak, Utah Div. of Oil & Mining
Phone: 801-538-5280
FAX: 810-359-3940
Date: February 21,2006
Salt Lake City, Utah

Remarks:
Collapse is based on a vertical depth of 2090 ft, a mud weight of 8.4 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

Well name:	**02-06 Crownquest TXP-Iron Springs 1-3**
Operator:	**Crownquest Operating, LLC**
String type:	Production
Project ID:	43-037-31106
Location:	San Juan County

Design parameters:

Collapse
Mud weight: 9.200 ppg
Design is based on evacuated pipe.

Burst
Max anticipated surface pressure: 2,269 psi
Internal gradient: 0.120 psi/ft
Calculated BHP 3,030 psi

No backup mud specified.

Minimum design factors:

Collapse:
Design factor 1.125

Burst:
Design factor 1.00

Tension:
8 Round STC: 1.80 (J)
8 Round LTC: 1.80 (J)
Buttress: 1.60 (J)
Premium: 1.50 (J)
Body yield: 1.50 (B)

Tension is based on buoyed weight.
Neutral point: 5,456 ft

Environment:
H2S considered? No
Surface temperature: 65 °F
Bottom hole temperature: 154 °F
Temperature gradient: 1.40 °F/100ft
Minimum section length: 1,500 ft

Cement top: 1,649 ft

Non-directional string.

Run Seq	Segment Length (ft)	Size (in)	Nominal Weight (lbs/ft)	Grade	End Finish	True Vert Depth (ft)	Measured Depth (ft)	Drift Diameter (in)	Internal Capacity (ft^3)
1	6340	5.5	17.00	P-110	LT&C	6340	6340	4.767	218.5

Run Seq	Collapse Load (psi)	Collapse Strength (psi)	Collapse Design Factor	Burst Load (psi)	Burst Strength (psi)	Burst Design Factor	Tension Load (Kips)	Tension Strength (Kips)	Tension Design Factor
1	3030	7480	2.469	3030	10640	3.51	93	445	4.80 J

Prepared by: Clinton Dworshak, Utah Div. of Oil & Mining
Phone: 801-538-5280
FAX: 810-359-3940
Date: February 21,2006
Salt Lake City, Utah

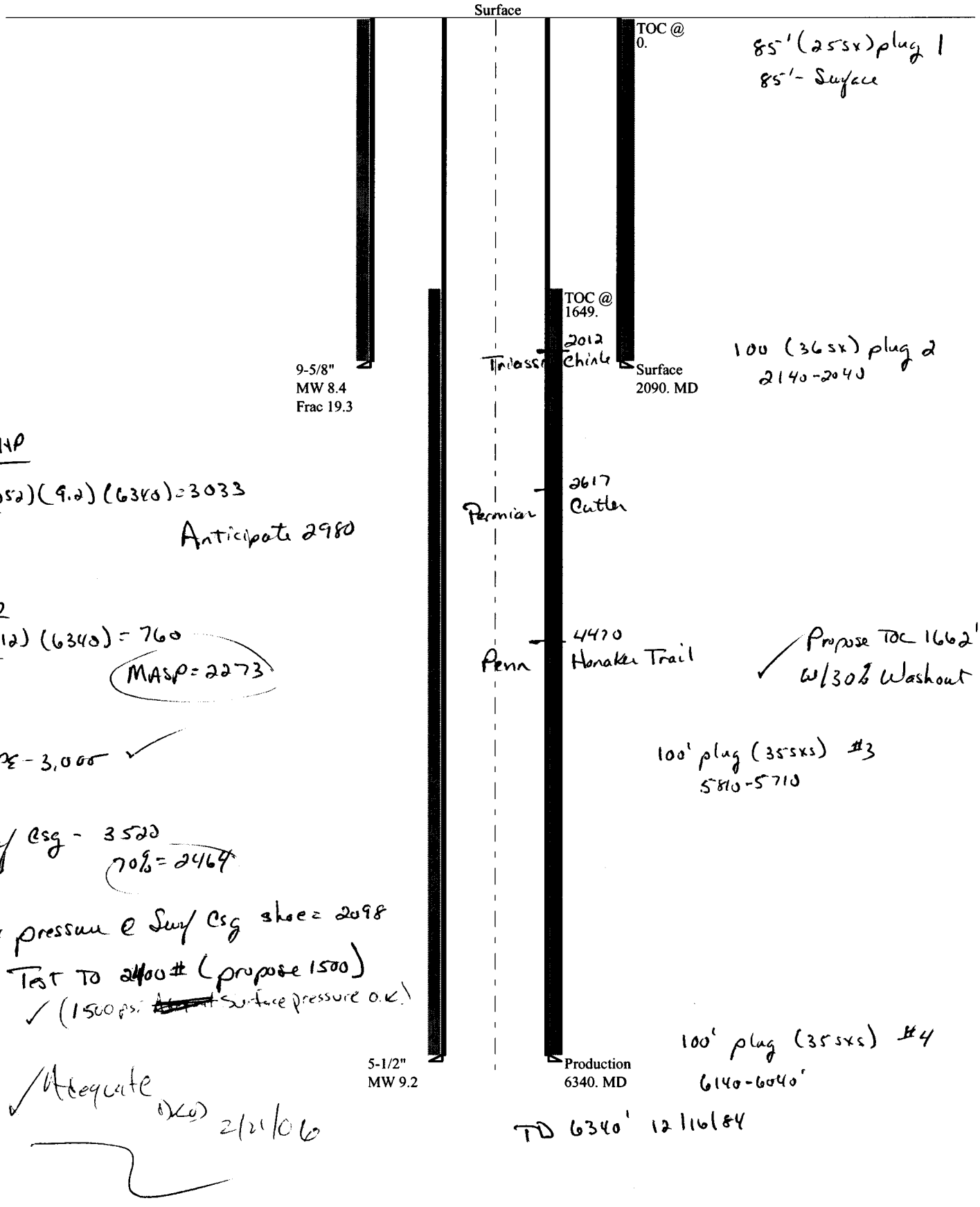
Remarks:
Collapse is based on a vertical depth of 6340 ft, a mud weight of 9.2 ppg The casing is considered to be evacuated for collapse purposes. Collapse strength is based on the Westcott, Dunlop & Kemler method of biaxial correction for tension.

Burst strength is not adjusted for tension.

Engineering responsibility for use of this design will be that of the purchaser.

2-06 Crownquest TXP-Iron Springs 1-3

Casing Schematic



BHP

(.052)(9.2)(6340) = 3033

Anticipate 2980

Gas

(.12)(6340) = 760

MASP = 2273

BOPE - 3,000 ✓

Surf Csg - 3520

70% = 2464

Max pressure @ Surf Csg shoe = 2098

Test to 2400# (propose 1500)

✓ (1500 psi ~~Surface~~ surface pressure O.K.)

✓ Adequate DKD 2/21/06

WORKSHEET

APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 02/14/2006

API NO. ASSIGNED: 43-037-31106

WELL NAME: TXP-IRON SPRINGS 1-3

OPERATOR: CROWNQUEST OPERATING, (N2685)

PHONE NUMBER: 432-685-3116

CONTACT: ROBERT GRIFFEE

PROPOSED LOCATION:

SWSE 03 330S 250E

SURFACE: 0266 FSL 1727 FEL

BOTTOM: 0266 FSL 1727 FEL

COUNTY: SAN JUAN

LATITUDE: 37.93172 LONGITUDE: -109.1599

UTM SURF EASTINGS: 661714 NORTHINGS: 4199630

FIELD NAME: WILDCAT (1)

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering	DKD	2/21/06
Geology		
Surface		

LEASE TYPE: 4 - Fee

LEASE NUMBER: FEE

PROPOSED FORMATION: AKAH

SURFACE OWNER: 4 - Fee

COALBED METHANE WELL? NO

RECEIVED AND/OR REVIEWED:

✓ Plat

✓ Bond: Fed[] Ind[] Sta[] Fee[]
(No. RLB0007554)

N Potash (Y/N)

N Oil Shale 190-5 (B) or 190-3 or 190-13

✓ Water Permit
(No. MUNICIPAL)

N RDCC Review (Y/N)
(Date:)

Y Fee Surf Agreement (Y/N)

NA Intent to Commingle (Y/N)

LOCATION AND SITING:

___ R649-2-3.

Unit:

___ R649-3-2. General
Siting: 460 From Qtr/Qtr & 920' Between Wells

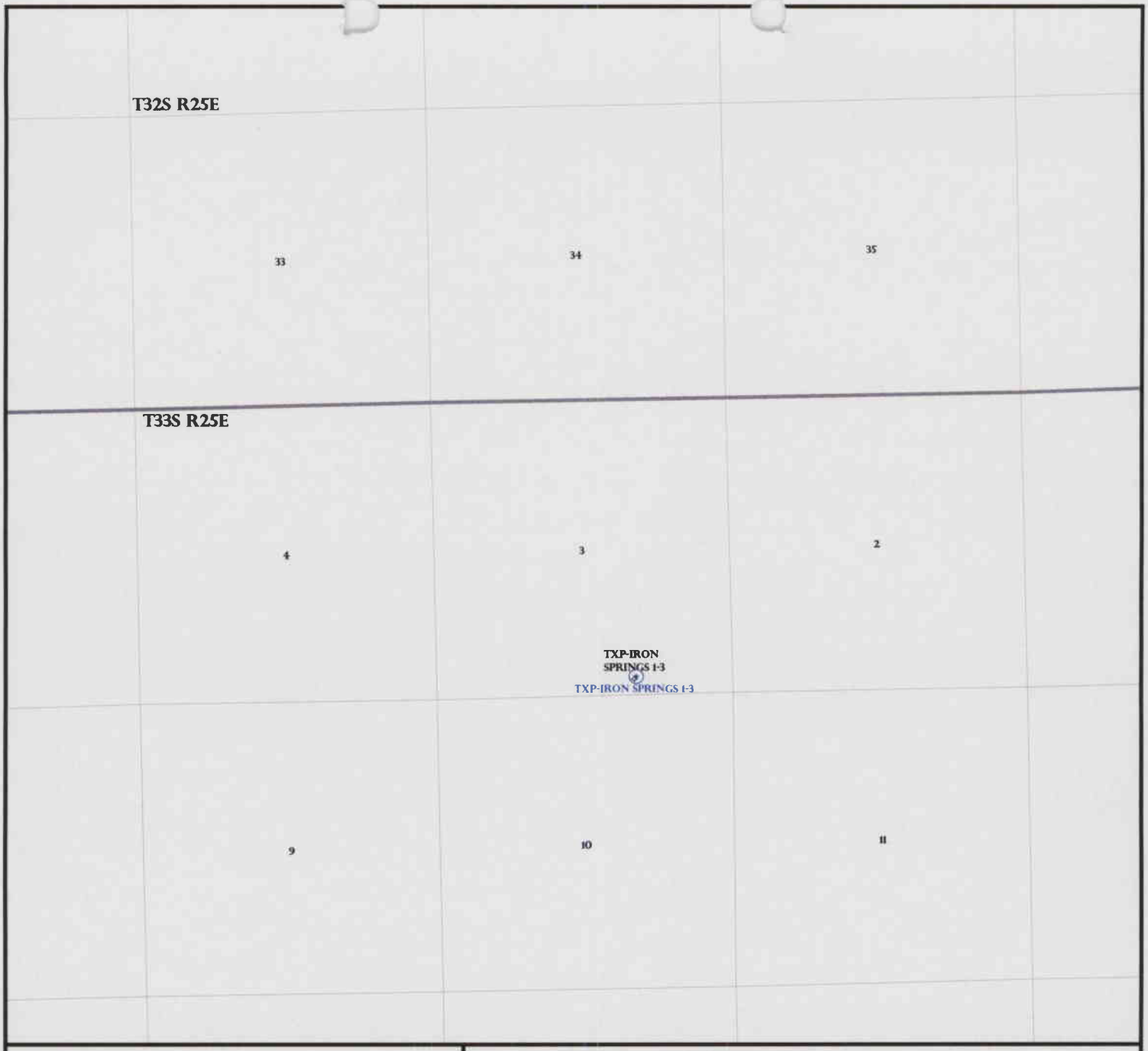
✓ R649-3-3. **Exception**

___ Drilling Unit
Board Cause No:
Eff Date:
Siting:

___ R649-3-11. Directional Drill

COMMENTS: Needs Presite

STIPULATIONS: 1- Spacing Slip
2- STATEMENT OF BASIS



OPERATOR: CROWNQUEST OPER (N2685)

SEC: 3 T. 33S R. 25E

FIELD: WILDCAT (001)

COUNTY: SAN JUAN

SPACING: R649-3-3 / EXCEPTION LOCATION

Field Status
- ABANDONED
- ACTIVE
- COMBINED
- INACTIVE
- PROPOSED
- STORAGE
- TERMINATED

Unit Status
- EXPLORATORY
- GAS STORAGE
- NF PP OIL
- NF SECONDARY
- PENDING
- PI OIL
- PP GAS
- PP GEOTHERML
- PP OIL
- SECONDARY
- TERMINATED

Wells Status
- GAS INJECTION
- GAS STORAGE
- LOCATION ABANDONED
- NEW LOCATION
- PLUGGED & ABANDONED
- PRODUCING GAS
- PRODUCING OIL
- SHUT-IN GAS
- SHUT-IN OIL
- TEMP. ABANDONED
- TEST WELL
- WATER INJECTION
- WATER SUPPLY
- WATER DISPOSAL
- DRILLING

Utah Oil Gas and Mining

N
W E
S

PREPARED BY: DIANA WHITNEY
DATE: 17-FEBRUARY-2006

RODDY PRODUCTION COMPANY, INC.
P.O. BOX 2221 • Farmington, New Mexico 87499
Telephone: (505) 325-5750 • Fax (505) 326-6814

2/20/06

Division of Oil, Gas, and Mining
1594 W. N. Temple, STE 1210
Salt Lake City, Utah 8114-5801

Re: TXP - Iron Springs 1-3

To Whom It May Concern;

In reference to the State Oil and Gas Conservation Rule R649-3-2, CrownQuest Operating, LLC, requests an exception for the TXP – Iron Springs 1-3 (API # 43-037-31106). The location of this well is 265.97' FSL x 1726.86' FEL, Section 3, T33S, R25E, San Juan County, Utah. We request the spacing exception due to the fact that we are re-entering and existing plugged and abandoned well that was drilled at the above described location. There are no other oil and gas mineral lease owners within a 460' radius of this location.

If you need additional information, please contact Robert R. Griffee at (505) 326-6813 or e-mail at bgriffcrpc@qwest.net.

Sincerely,

Robert R. Griffee
Operations Manager
(Agent for CrownQuest Operating LLC)

State of Utah

Department of Natural Resources

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas & Mining

JOHN R. BAZA
Division Director

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

February 28, 2006

CrownQuest Operating, LLC
303 Wall, Suite 1400
Midland, TX 79702

Re: TXP-Iron Springs 1-3 Well, 266' FSL, 1727' FEL, SW SE, Sec. 3, T. 33 South, R. 25 East, San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann.§ 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-31106.

Sincerely,

Gil Hunt
Associate Director

pab
Enclosures

cc: San Juan County Assessor

1594 West North Temple, Suite 1210, PO Box 145801, Salt Lake City, UT 84114-5801
telephone (801) 538-5340 • facsimile (801) 359-3940 • TTY (801) 538-7458 • *www.ogm.utah.gov*

5. This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled, completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

CROWNQUEST

CROWNQUEST OPERATING, LLC

May 26, 2006

Utah Division of Oil, Gas and Minerals
1594 West North Temple
Suite 1210
Box 145801
Salt Lake City, Utah 84114

Re: TXP-Iron Springs ~~3-1~~ 1-3
Section 3, T-33-S, R-25-E
San Juan County, Utah

43-037-31106

Ladies and Gentlemen:

Pursuant to R649-2-11, CrownQuest Operating Company, LLC, the Operator of the above captioned well, hereby requests that you keep confidential all information you receive for the above captioned well.

Thanks for your attention to this matter. Should you have any questions please do not hesitate to contact me.

Very truly yours,

M. Craig Clark

MCC/s

[illegible] W. Wall • Suite 1400 • P. O. Box 2990 • Midland, Texas 79702 • 432.685.8116 • FAX 432.687.4834

CONFIDENTIAL

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

FORM 9

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.

5. LEASE DESIGNATION AND SERIAL NUMBER: Fee

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: n/a

7. UNIT or CA AGREEMENT NAME:

1. TYPE OF WELL: OIL WELL ☐ GAS WELL ☑ OTHER

8. WELL NAME and NUMBER: TXP Iron Springs 1-3

2. NAME OF OPERATOR: CrownQuest Operating, LLC

9. API NUMBER: 4303731106

3. ADDRESS OF OPERATOR: 303 Veterans Airpark Ln, Midland TX 79705

PHONE NUMBER: (432) 818-0300

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL

FOOTAGES AT SURFACE: 265.97' FSL x 1726.86 FEL

COUNTY: San Juan

QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: SWSE 3 33S 25E

STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
☑ NOTICE OF INTENT (Submit in Duplicate)	☐ ACIDIZE	☐ DEEPEN	☐ REPERFORATE CURRENT FORMATION
Approximate date work will start: 2/28/2007	☐ ALTER CASING	☐ FRACTURE TREAT	☐ SIDETRACK TO REPAIR WELL
	☐ CASING REPAIR	☐ NEW CONSTRUCTION	☐ TEMPORARILY ABANDON
	☐ CHANGE TO PREVIOUS PLANS	☐ OPERATOR CHANGE	☐ TUBING REPAIR
	☐ CHANGE TUBING	☐ PLUG AND ABANDON	☐ VENT OR FLARE
☐ SUBSEQUENT REPORT (Submit Original Form Only)	☐ CHANGE WELL NAME	☐ PLUG BACK	☐ WATER DISPOSAL
Date of work completion:	☐ CHANGE WELL STATUS	☐ PRODUCTION (START/RESUME)	☐ WATER SHUT-OFF
	☐ COMMINGLE PRODUCING FORMATIONS	☐ RECLAMATION OF WELL SITE	☑ OTHER: permit extension
	☐ CONVERT WELL TYPE	☐ RECOMPLETE - DIFFERENT FORMATION	

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

CrownQuest Operating, LLC requests a permit extension for the TXP Iron Springs 1-3. The well was originally permitted on 02/28/2006. CrownQuest was unable to re-enter the well within the permitted year due to Sage Grouse restrictions and rig availability. CrownQuest intends to re-enter shortly after Sage Grouse mating season is over.

Approved by the
Utah Division of
Oil, Gas and Mining

Date: 03-19-07

By:

COPY SENT TO OPERATOR
Date: 3-20-07
Initials: RM

NAME (PLEASE PRINT) Robert R. Griffee TITLE Operations Manager, agent for CrownQuest

SIGNATURE R. R. Griffee DATE 2/28/2007

(This space for State use only)

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MAR 15 2007
DIV. OF OIL, GAS & MINING

(5/2000) (See Instructions on Reverse Side)

[redacted]

Application for Permit to Drill
Request for Permit Extension
Validation
(this form should accompany the Sundry Notice requesting permit extension)

API: 43-037-31106
Well Name: TXP Iron Springs 1-3
Location: Section 3, T33S, R25E
Company Permit Issued to: CrownQuest Operating, LLC
Date Original Permit Issued: 2/28/2006

The undersigned as owner with legal rights to drill on the property as permitted above, hereby verifies that the information as submitted in the previously approved application to drill, remains valid and does not require revision.

Following is a checklist of some items related to the application, which should be verified.

If located on private land, has the ownership changed, if so, has the surface agreement been updated? Yes☐ No☑

Have any wells been drilled in the vicinity of the proposed well which would affect the spacing or siting requirements for this location? Yes☐ No☑

Has there been any unit or other agreements put in place that could affect the permitting or operation of this proposed well? Yes☐ No☑

Have there been any changes to the access route including ownership, or right-of-way, which could affect the proposed location? Yes☐ No☑

Has the approved source of water for drilling changed? Yes☐ No☑

Have there been any physical changes to the surface location or access route which will require a change in plans from what was discussed at the onsite evaluation? Yes☐ No☑

Is bonding still in place, which covers this proposed well? Yes☑ No☐

Signature

2/28/2007
Date

Title: Operations Manager, agent for CrownQue

Representing: CrownQuest Operating, LLC

RECEIVED
MAR 07 2007
DIV. OF OIL, GAS & MINING

JON M. HUNTSMAN, JR.
Governor

GARY R. HERBERT
Lieutenant Governor

State of Utah
DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

April 30, 2008

Robert Griffee
CrownQuest Operating, LLC
303 Veterans Airpark Ln.
Midland, TX 79705

Re: APD Rescinded – TXP Iron Springs 1-3 Sec. 3, T. 33S, R.25E San Juan, Utah API No. 43-037-31106

Dear Mr. Griffee:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (the Division) on February 28, 2006. On March 19, 2007 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill this well is hereby rescinded, effective April 30, 2008.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject locations.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Environmental Scientist

cc: Well File
Brad Hill, Technical Services Manager

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UTAH DNR
OIL, GAS & MINING